

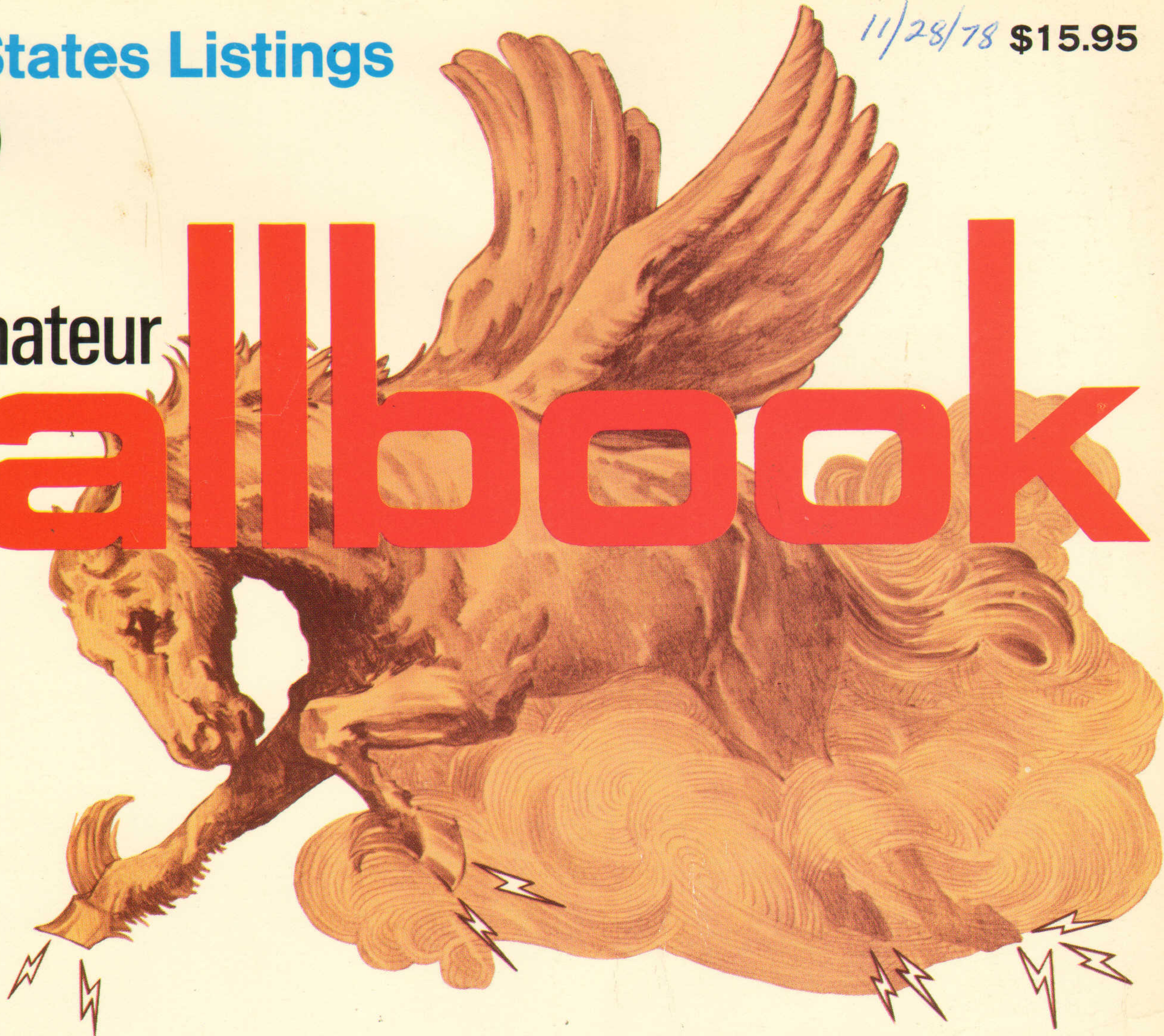
United States Listings

1979

11/28/78 \$15.95

radio amateur

callbook



The only publication listing licensed radio amateurs throughout the world, since 1920.

In this issue . . .

- **374,487 licensed radio amateurs!**
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- **118,760 changes in listings!**
- **Slow Scan Television Directory!**
- **Stop Press—late QTH's!**
- **Then & Now—Call letter changes!**
- **Silent Keys deleted from this issue!**
- **QSL Managers Around the World!**
- **Radio Amateur Prefixes of the world, with map!**
- **A.R.R.L. Countries List!**
- **Zip Codes and License Class on all Listings!**
- **International Postal Information!**
- **Standard Time Charts!**
- **Census of Amateur Radio Licenses of the World!**
- **Census of Amateur Radio Licenses of the U.S.!**
- **World Wide QSL Bureaus!**
- **Plus many other features!**

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For Use Throughout 1979

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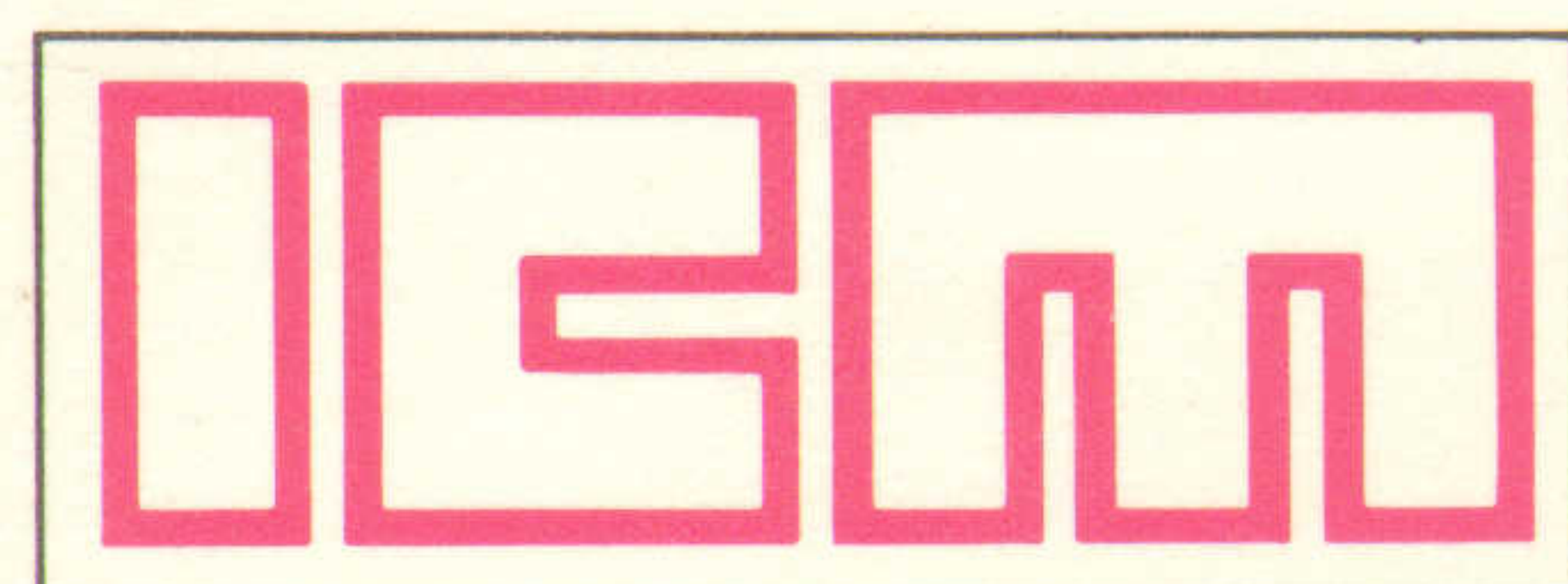
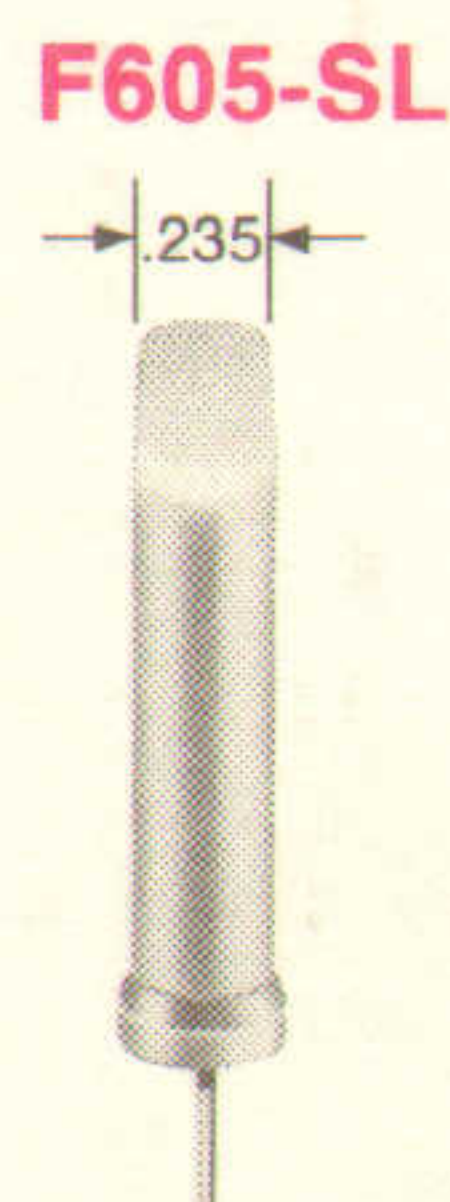
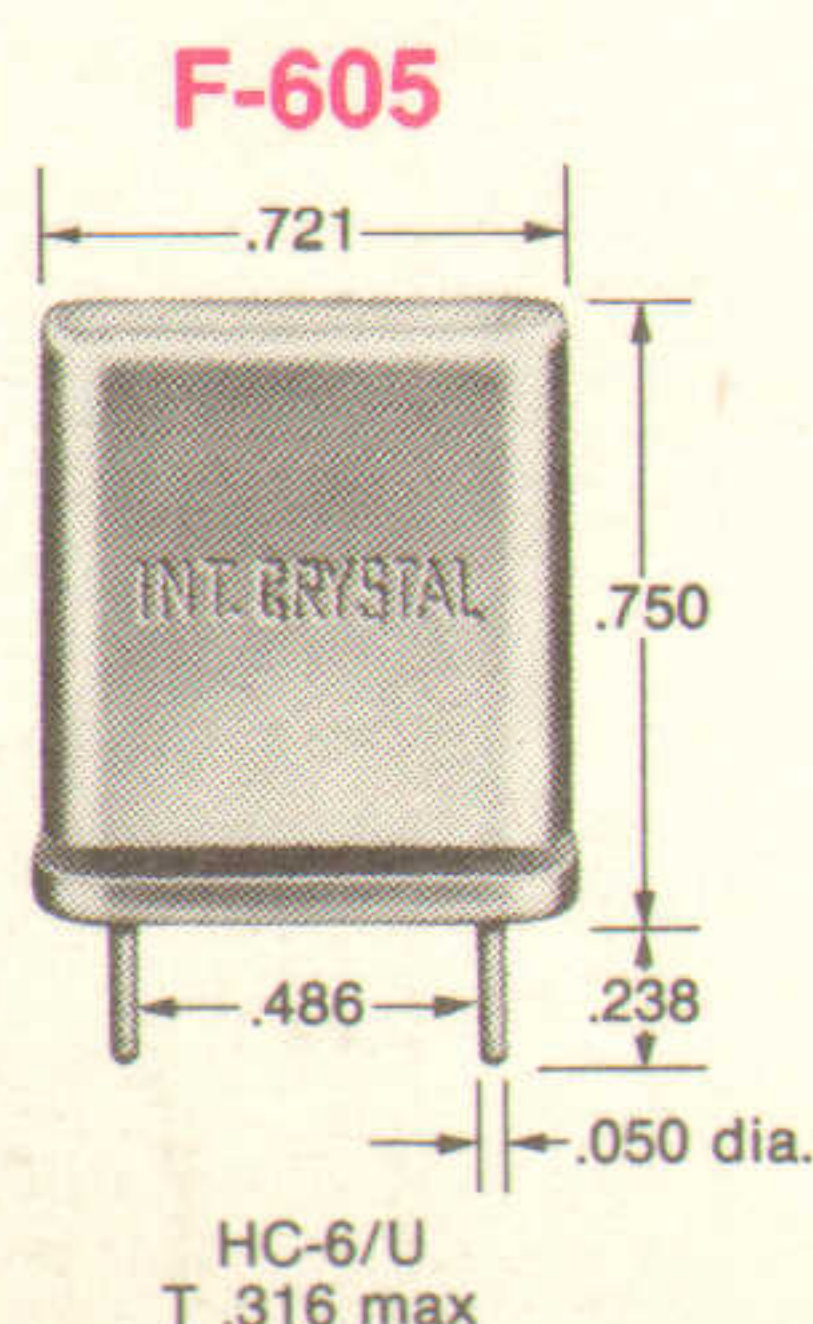
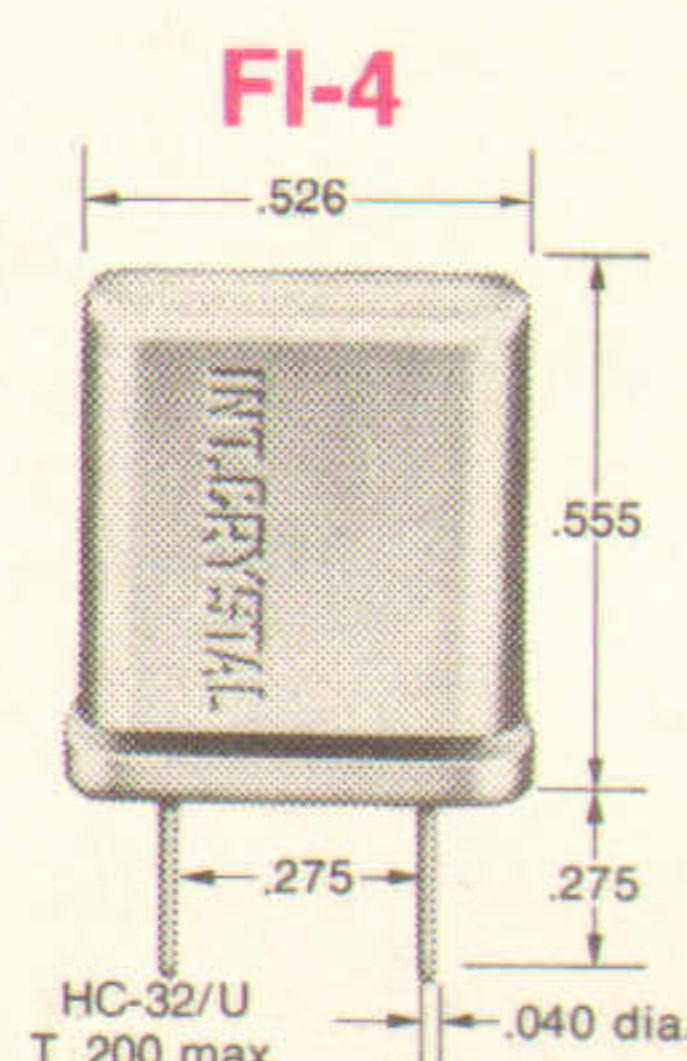
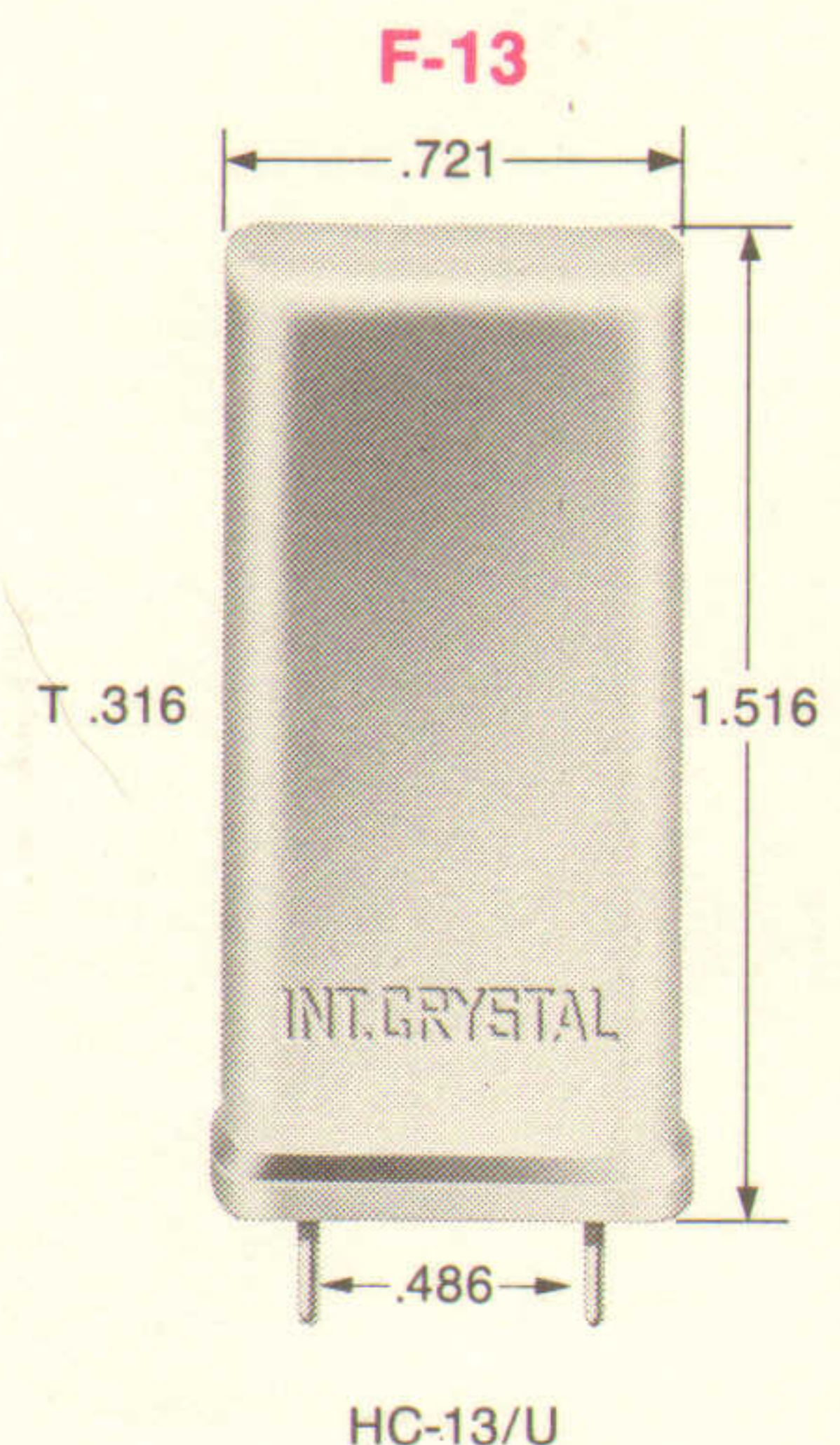
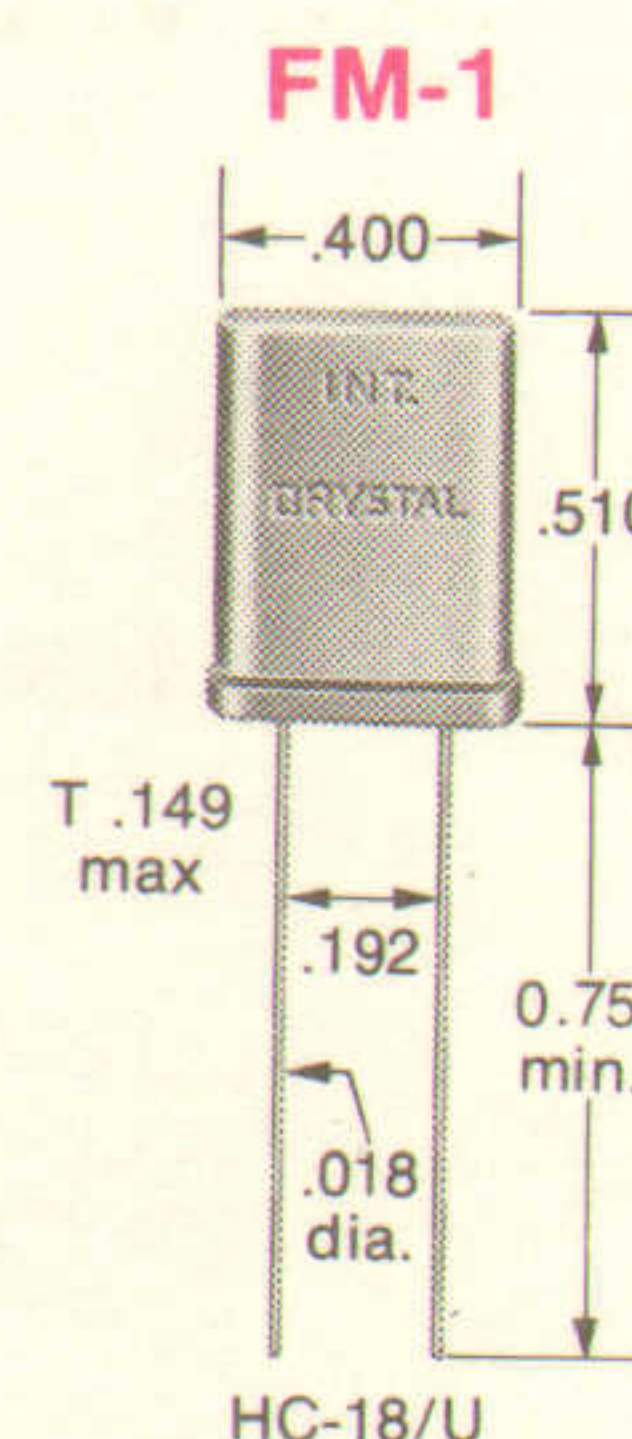
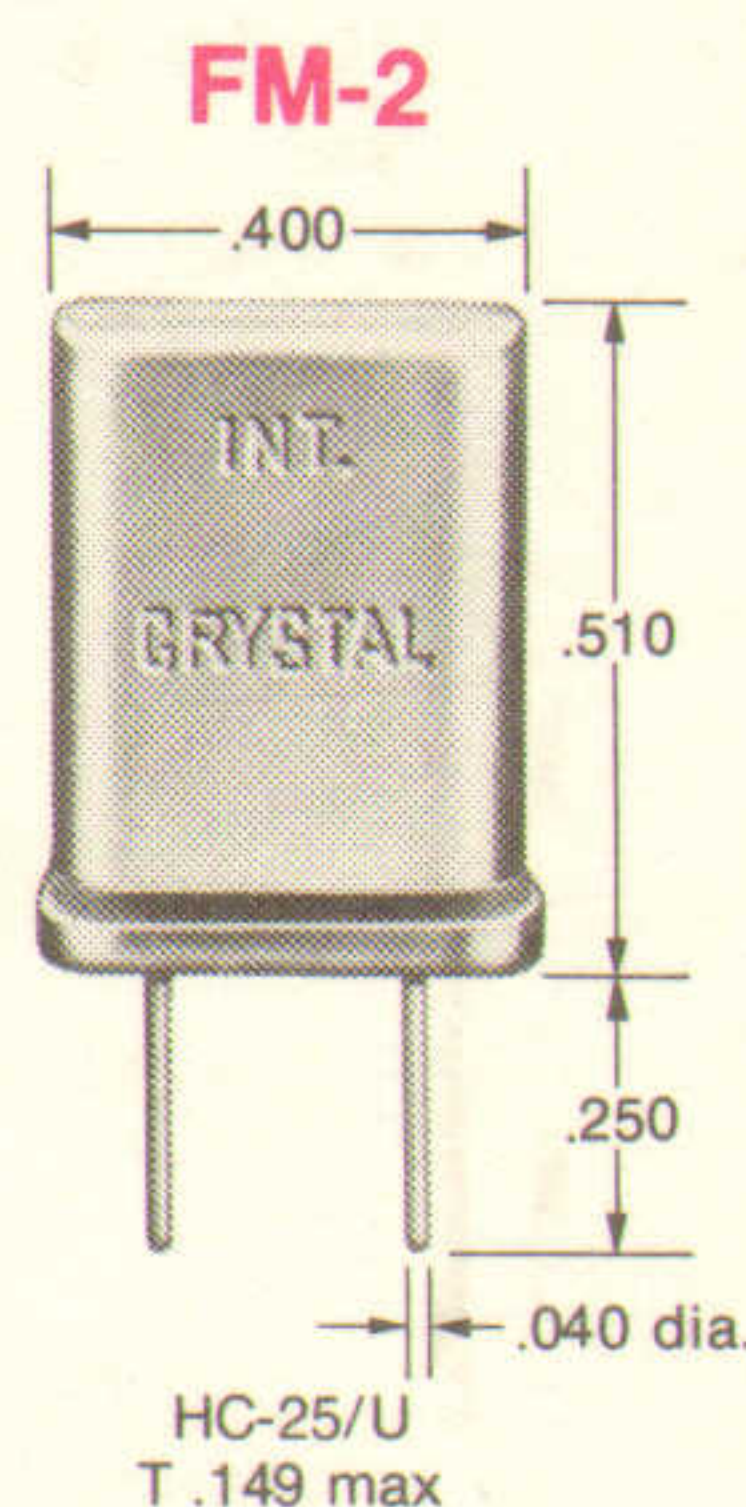
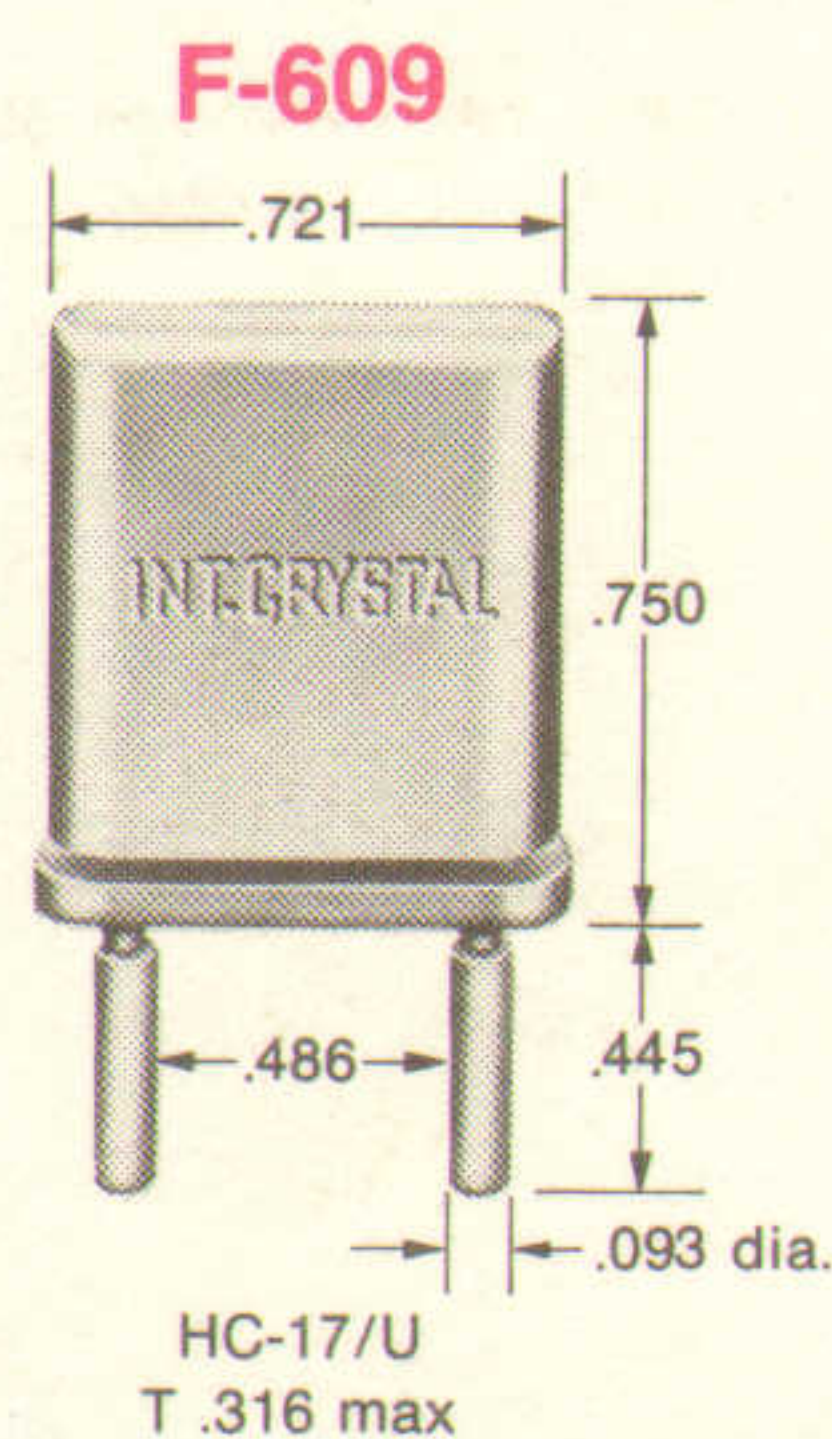
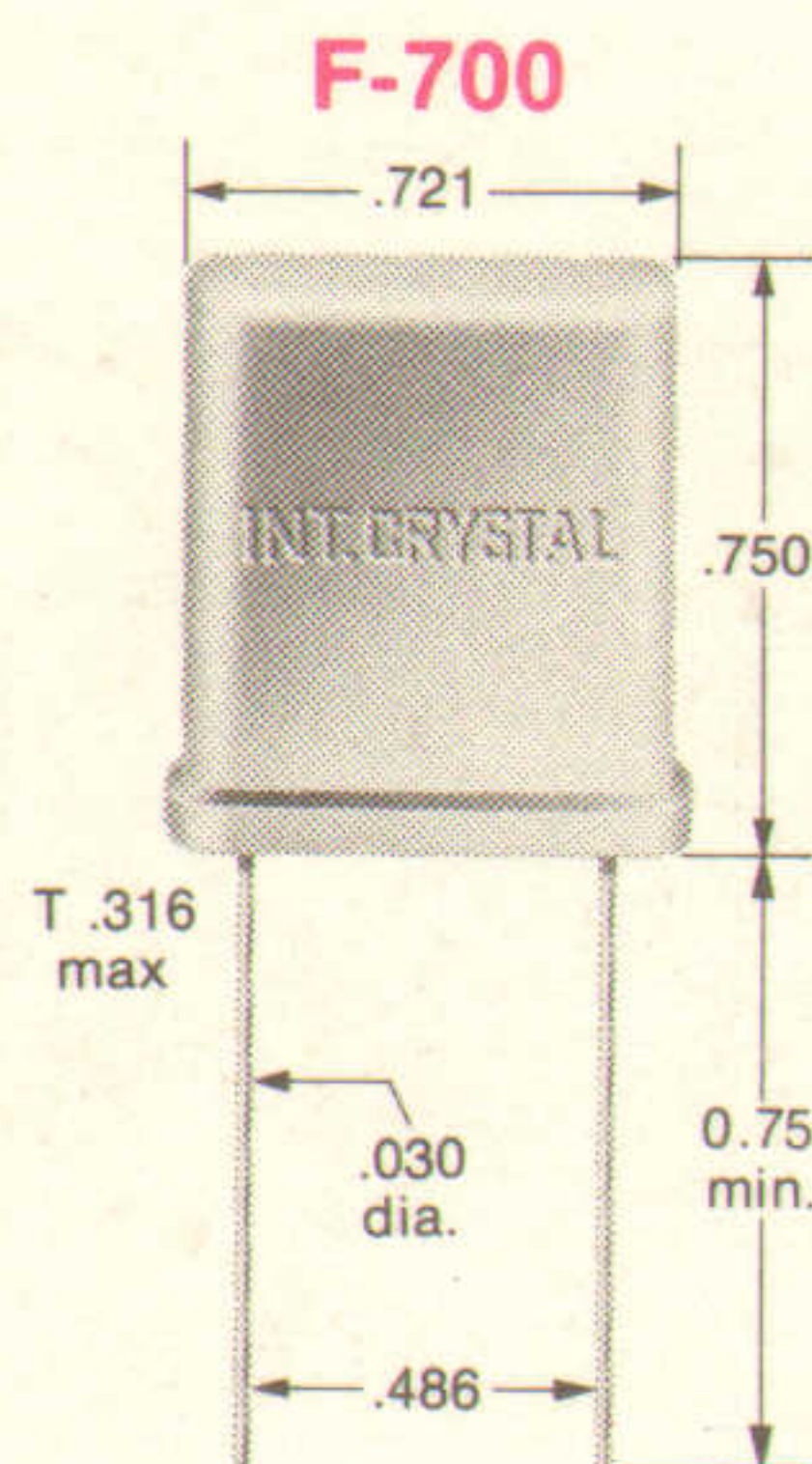
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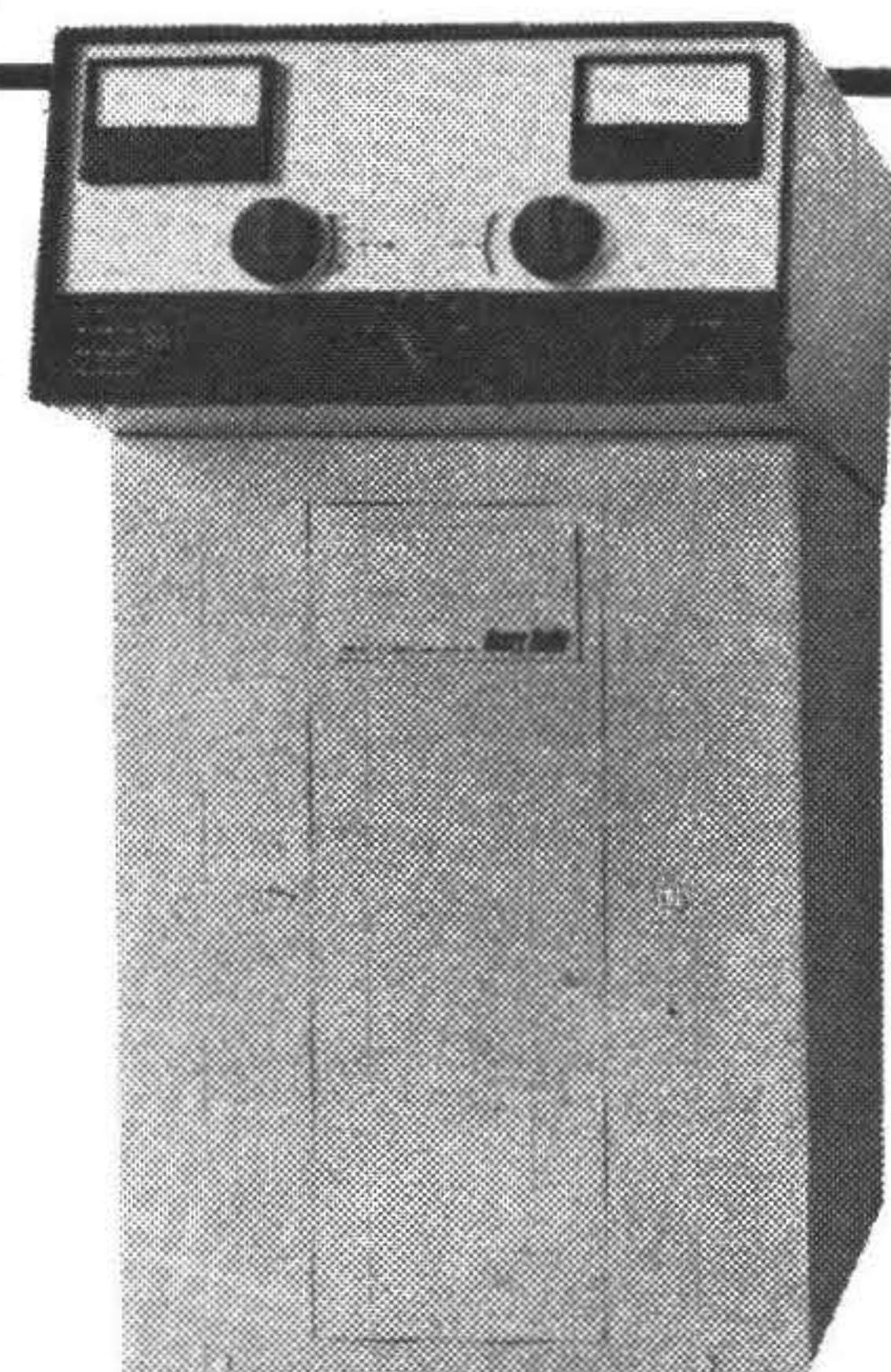
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RADIO AMATEURS OF THE U. S. A.

VOLUME 57
NUMBER 1

K AND W CALLS

WINTER 1978-79

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FIRST CALL AREA.....	1	SIXTH CALL AREA.....	513
Includes the States of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont.		Includes the State of California.	
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Includes the States of New Jersey and New York.		Includes the States of Arizona, Idaho, Montana, Nevada, Oregon, Utah, Washington and Wyoming.	
THIRD CALL AREA.....	178	EIGHTH CALL AREA.....	730
Includes the States of Delaware, Maryland, Pennsylvania, and the District of Columbia.		Includes the States of Michigan, Ohio and West Virginia.	
FOURTH CALL AREA.....	249	NINTH CALL AREA.....	832
Includes the States of Alabama, Florida, Georgia, Kentucky, North and South Carolina, Tennessee and Virginia.		Includes the States of Illinois, Indiana and Wisconsin.	
FIFTH CALL AREA.....	412	TENTH CALL AREA.....	923
Includes the States of Arkansas, Louisiana, Mississippi, New Mexico, Oklahoma and Texas.		Includes the States of Colorado, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota and South Dakota.	
		OTHER CALLS INCLUDING HAWAII AND ALASKA.....	1017

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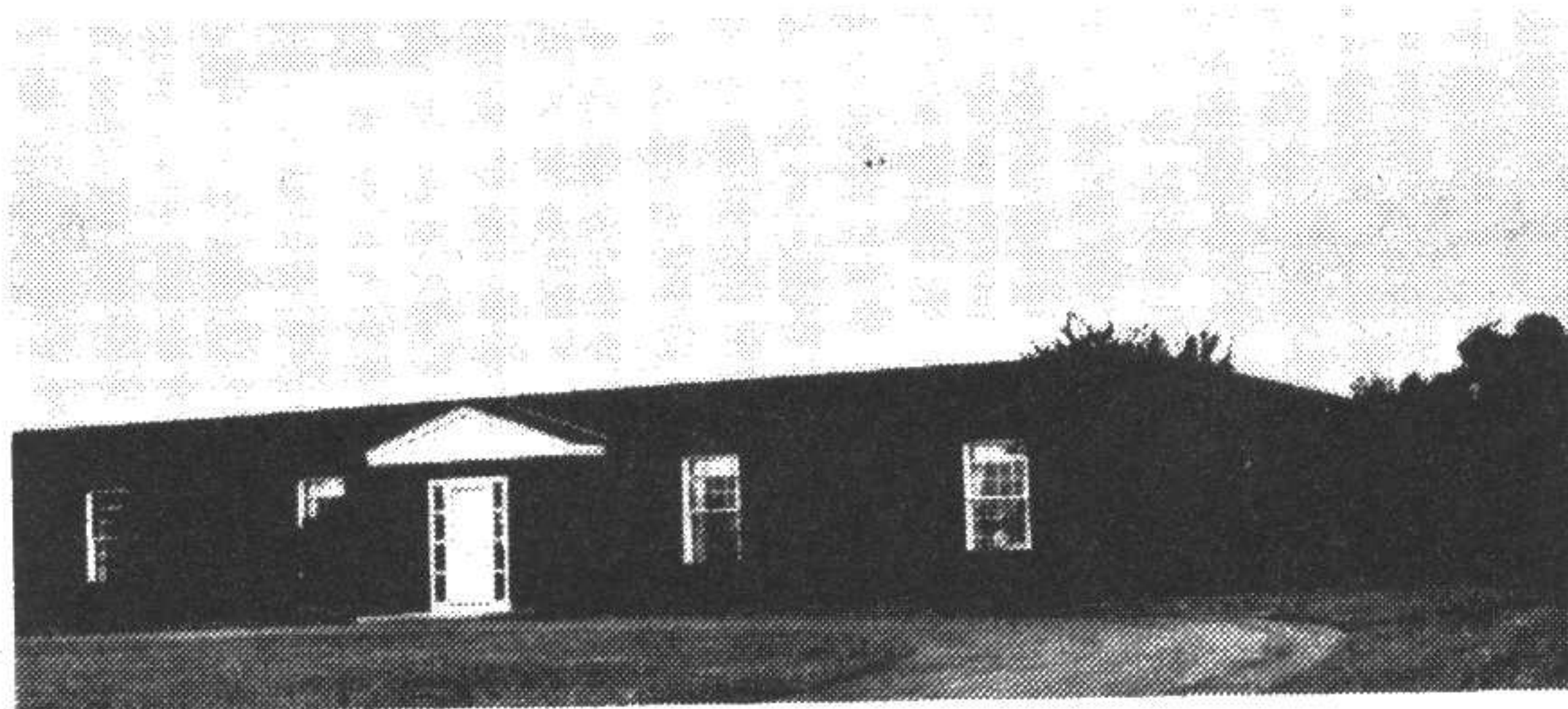
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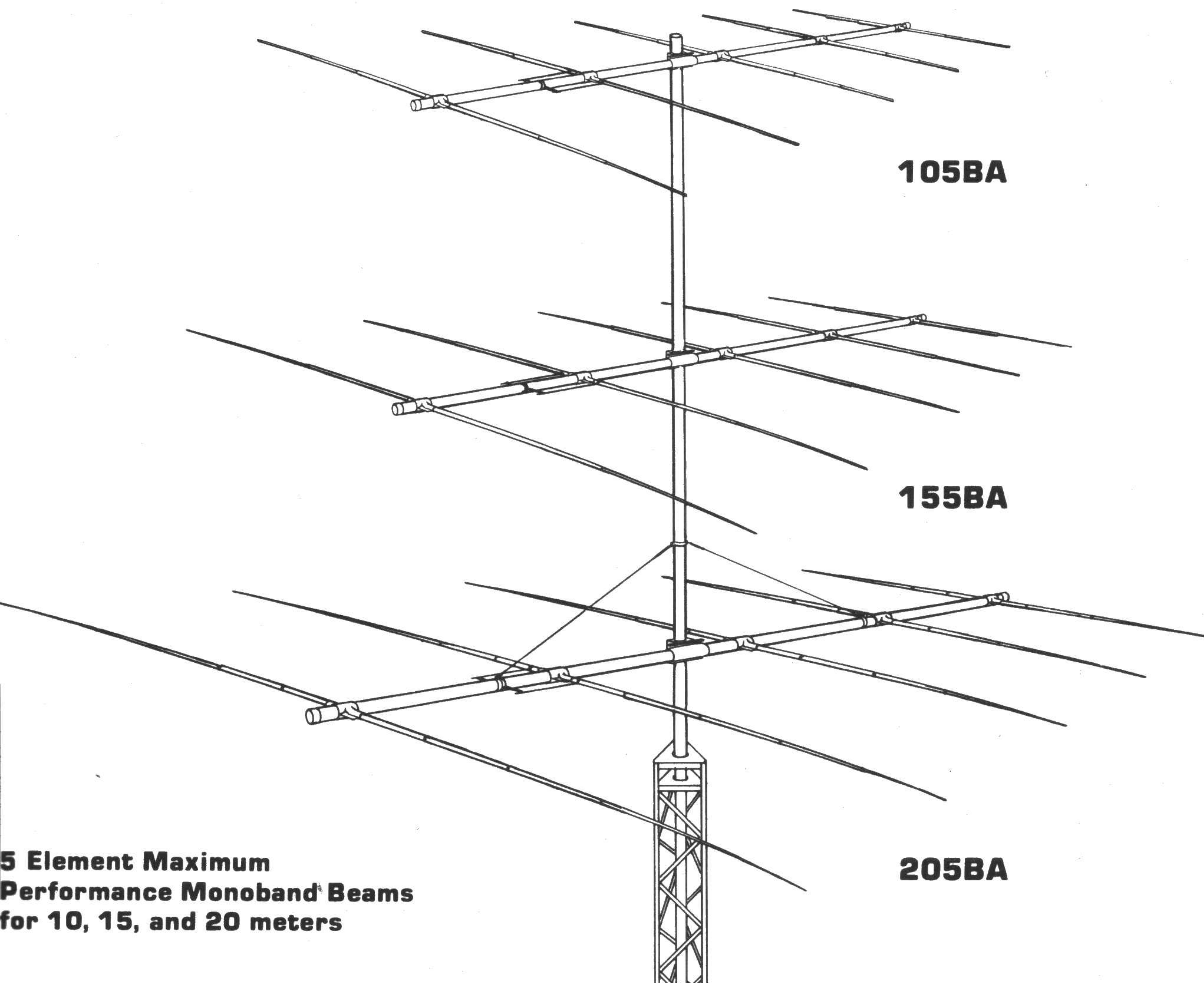
A year around staff, through the use of electronic data processing equipment, evaluates and compiles the directory information received daily from all over the world. Extensive library and historical records are maintained to provide the most complete and accurate Callbook possible to produce.

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for 10, 15, and 20 meters**

With sunspot cycle 21 now in the upswing, you should be prepared for the DX available on the 3 top HF bands, if not, our new "Long-Johns" are for you. The new 5 element "Long-John" monobanders are ideal for the serious DX'er. Each utilizes Hy-Gain's unique Beta-match for optimum power transfer. Also each antenna uses taper-swaged tubing for minimum wind load and maximum strength. For maximum durability each "Long-John" uses Hy-Gain's rugged boom-to-mast clamp.

Specifications:

Order Number	377	376	375
Model Number	205BA	115BA	105BA
Gain	11.6 dB	12.0 dB	12.0 dB
Front-to-back ratio	20 dB minimum	20 dB minimum	20 dB minimum
SWR (at resonance)	Less than 1.5:1	Less than 1.5:1	Less than 1.5:1
Impedance	50 ohms	50 ohms	50 ohms
Power rating	Maximum Legal	Maximum Legal	Maximum Legal
2:1 VSWR Bandwidth	400 KHz	500 KHz	1.5 MHz
Longest Element	36½'	24½'	18½'
Boom Length	34'	26'	24'
Boom Diameter	2"	2"	2"
Turning Radius	25'	17½'	15'
Surface Area	9.0 sq. ft.	5.2 sq. ft.	3.9 sq. ft.
Wind Load at 80 mph	230 lbs.	133 lbs.	100 lbs.
Maximum Wind Survival	80 mph	100 mph	100 mph
Mast DIA Accepted	1¼" to 2½"	1¼" to 2½"	1¼" to 2½"



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(402) 467-5321 telex: 48-4324

PREFIXES-BY COUNTRIES

The following countries listed in alphabetical order by country show international radio amateur prefixes. Characters in () designate the continent and zone in which the country is located. Abbreviations are as follows: A—Asia, AF—Africa, E—Europe, NA—North America, O—Oceania, SA—South America.

AFGHANISTAN.....(A-21).....YA
 AGALEGA IS.....(AF-39).....3B6
 ALAND IS.....(E-15).....OHØ
 ALASKA.....(NA-1).....KL7
 ALBANIA.....(E-15).....ZA
 ALGERIA.....(AF-33).....7X
 AMSTERDAM & ST. PAUL IS.....(AF-39).....FB8Z
 ANDAMAN & NICOBAR IS.....(A-26).....VU7
 ANDORRA.....(E-14).....C31
 ANGOLA.....(AF-36).....D2A
 ANTARCTICA.....(E-15).....CE9AA-AM, FB8Y, KC4, LU-Z,
 UAL, VKØ, VP8, ZL5, ZS1ANT, 3Y, 4K1, 8J
 ARAN IS.....(E-14).....EJØ
 ARGENTINA.....(SA-13).....LU
 ARUBA.....(SA-9).....PJ3,9
 ASCENSION IS.....(AF-36).....Z08
 AUCKLAND & CAMPBELL IS.....(O-32).....ZL
 AUSTRALIA.....(O-29 & 30).....VK
 AUSTRIA.....(E-15).....OE
 AVES IS.....(NA-8).....YVØ
 AZORES IS.....(E-14).....CT2

BAHAMA IS.....(NA-8).....C6A
 BAHRAIN IS.....(A-21).....A9X
 BAJO NUEVO IS.....(NA-8).....HKØ
 BAKER IS.....(O-31).....KB6
 BALEARIC IS.....(E-14).....E6A
 BANGLADESH.....(A-22).....S2, S3
 BARBADOS IS.....(NA-8).....8P6
 BELGIUM.....(E-14).....ON
 BELIZE.....(NA-7).....VP1
 BENIN, PEOPLE'S REP OF.....(AF-35).....TY
 BERMUDA IS.....(NA-5).....VP9
 BHUTAN.....(A-22).....A51
 BOLIVIA.....(SA-10).....CP
 BONAIRE.....(SA-9).....PJ4,9
 BOPHUTHATSWANA, REP OF.....(AF-38).....H5
 BOTSWANA.....(AF-38).....A2C
 BOUVET IS.....(AF-38).....3Y
 BRAZIL.....(SA-11).....PP-PY
 BRITISH PHOENIX IS.....(O-31).....VR1
 BRUNET.....(O-28).....V55
 BULGARIA.....(E-20).....LZ
 BURMA.....(A-26).....XZ
 BURUNDI.....(AF-36).....9U5

CAMBODIA/KHMER REP.....(A-26).....XU
 CAMEROON.....(AF-36).....TJ
 CANADA.....(NA-1 TO 5).....VE
 CANAL ZONE.....(NA-7).....KZ5
 CANARY IS.....(AF-33).....EAB
 CANTON IS.....(O-31).....KB6
 CAPE VERDE, REP OF.....(AF-35).....D4
 CAPRI IS.....(E-15).....IC
 CAROLINE IS.....(O-27).....KC6
 CAYMAN IS.....(NA-8).....ZF1
 CENTRAL AFRICAN REPUBLIC.....(AF-36).....TL8
 CEUTA Y MELILLA, SPANISH.....(A-33).....EA9
 CHAD REPUBLIC.....(AF-36).....TT8
 CHAGOS IS.....(AF-39).....VQ9
 CHATHAM IS.....(O-32).....ZL
 CHILE.....(SA-12).....CE
 CHINA, PEOPLES REP OF.....(A-23 & 24).....BY
 CHRISTMAS IS.....(O-29).....VK9X
 CLIPPERTON IS.....(NA-7).....F08
 COCOS IS.....(NA-7).....TI9
 COCOS (KEELING) IS.....(O-29).....VK9Y
 COLOMBIA.....(SA-9).....HK
 COMORO, STATE OF.....(AF-39).....D6
 CONGO, REPUBLIC OF.....(AF-36).....TN8
 COOK IS.....(O-32).....ZK1
 CORSICA.....(E-15).....FC
 COSTA RICA.....(NA-7).....TI
 CRETE, GREECE.....(E-20).....SV
 CROZET IS.....(AF-39).....FB8W
 CUBA.....(NA-8).....CM, CD
 CURACAO.....(SA-9).....PJ2,9
 CYPRUS.....(A-20).....5B4, ZC4
 CZECHOSLOVAKIA.....(E-15).....DK, OL
 DEM RP ST THOMAS-PRINCEPE.....(AF-36).....S9
 DENMARK.....(E-14).....QZ
 DJIBOUTI, REP OF.....(AF-37).....J2
 DODECANESE IS.....(E-20).....SV5
 DOMINICAN REPUBLIC.....(NA-8).....HI

EASTER IS.....(SA-12).....CEØA
 ECUADOR.....(SA-10).....HC
 EGYPT.....(AF-34).....SU
 EL SALVADOR.....(NA-7).....YS
 ENDERBURY IS.....(O-31).....KB6
 ENGLAND.....(E-14).....G
 ETHIOPIA.....(AF-37).....ET3

FAEROES IS.....(E-14).....ØY
 FALKLAND IS.....(SA-13).....VP8
 FERNANDO DE NORONHA.....(SA-11).....PYØ
 FIJI IS.....(O-32).....302
 FINLAND.....(E-15).....ØH
 FRANCE.....(E-14).....F
 FRENCH POLYNESIA.....(O-31 & 32).....F08

GABON REPUBLIC.....(AF-36).....TR8
 GALAPAGOS IS.....(SA-10).....HC8
 GAMBIA.....(AF-35).....C5A
 GERMANY, FED. REP. (WEST).....(E-14).....DA-DL
 GERMAN DEM. REP. EAST.....(E-14).....DM
 GHANA.....(AF-35).....9G1
 GIRALTAR.....(E-14).....ZB2
 GILBERT & OCEAN IS.....(O-31).....VR1
 GLORIOSO IS.....(AF-39).....FR7
 GOUGH IS.....(AF-38).....ZD9
 GOZO (MALTA).....(E-15).....9H4
 GRAHAM LAND.....(SA-13).....VP8, LU-Z
 GREECE.....(E-20).....SV
 GREENLAND.....(NA-40).....ØX
 GRENADA.....(NA-8).....J3
 GUADELOUPE.....(NA-8).....FG7
 GUAM IS.....(O-27).....KG6
 GUANTANAMO BAY.....(NA-8).....KG4
 GUATEMALA.....(NA-7).....TG
 GUERNSEY, BAILLIWICK OF.....(E-14).....GU
 GUIANA, FRENCH.....(SA-9).....FY7
 GUINEA BISSAU.....(AF-35).....CR3
 GUINEA, EQUATORIAL.....(AF-36).....3C
 GUINEA, REPUBLIC OF.....(AF-35).....3X
 GUYANA.....(SA-9).....BR

HAITI.....(NA-8).....HH
 HAWAII.....(O-31).....KH6
 HEARD IS.....(AF-39).....VKØ
 HONDURAS.....(NA-7).....HR
 HONG KONG.....(A-24).....VS6
 HOWLAND IS.....(O-31).....KB6
 HUNGARY.....(E-15).....HA, HG

ICELAND.....(E-40).....TF
 INDIA.....(A-22).....VU2
 INDONESIA.....(O-28).....YB-YD
 IRAN.....(A-21).....EP
 IRAQ.....(A-21).....YI
 IRELAND.....(E-14).....EI
 ISCHIA.....(E-15).....IC
 ISLE OF MAN.....(E-14).....GD
 ISRAEL.....(A-20).....4X4, 4Z4
 ITALY.....(E-15).....I, IW
 IVORY COAST.....(AF-35).....TU2

JAMAICA.....(NA-8).....6Y5
 JAN MAYEN IS.....(E-40).....JX
 JAPAN.....(A-25).....JA-JR
 JAPAN, U.S. PERSONNEL IN.....(A-25).....KA
 JARVIS IS.....(O-31).....KP6
 JERSEY.....(E-14).....GJ
 JOHNSTON IS.....(O-31).....KJ6
 JORDAN.....(A-20).....JY
 JUAN DE NOVA IS.....(AF-39).....FR7
 JUAN FERNANDEZ IS.....(SA-12).....CEØZ

KAMARAN IS.....(A-21).....70
 KENYA.....(AF-37).....5Z4
 KERGUELEN IS.....(AF-39).....FB8X
 KERMADEC IS.....(O-32).....ZL
 KOREA.....(A-25).....HM, HL9
 KURE IS.....(O-31).....KH6
 KUWAIT.....(A-21).....9K2

LABRADOR.....(NA-2).....VØ2
 LACCADIVE IS.....(A-22).....VU7
 LAMPEDUSA IS.....(AF-33).....IG9
 LAOS.....(A-26).....XW8
 LEBANON.....(A-20).....ØD5
 LEeward IS.....

ANGUILLA.....(NA-8).....VP2E
 ANTIGUA, BARBUDA.....(NA-8).....VP2A
 BRITISH VIRGIN IS.....(NA-8).....VP2V
 MONTserrat.....(NA-8).....VP2M
 ST. KITTS, NEVIS.....(NA-8).....VP2K
 LESOTHO.....(AF-38).....TP8
 LIBERIA.....(AF-35).....EL, 5L
 LIBYAN ARAB REPUBLIC.....(AF-34).....5A
 LIECHTENSTEIN.....(E-14).....HBØ
 LINE IS, NORTHERN.....(O-31).....VR3
 LINE IS, CENTRAL & SOUTHERN.....(O-31).....VR7
 LORD HOWE IS.....(O-30).....VK2
 LUXEMBOURG.....(E-14).....LX

MACAO.....(A-24).....CR9
 MACQUARIE IS.....(O-30).....VKØ
 MADDALENA IS.....(E-15).....IM
 MADEIRA IS.....(AF-33).....CT3
 MALAGASY REPUBLIC.....(AF-39).....5R8
 MALAWI.....(AF-37).....TQ7
 MALAYSIA, EAST.....(A-28).....9M6, 8
 MALAYSIA, WEST.....(A-28).....9M2
 MALDIVE IS.....(A-22).....8Q6
 MALI REPUBLIC.....(AF-35).....TZ
 MALPELO IS.....(SA-9).....HKØ
 MALTA.....(E-15).....9H1, 5
 MANIHIKI IS.....(O-32).....ZK1
 MARIANA IS.....(O-27).....KG6
 MARKET REEF.....(E-15).....ØJØ, ØHØM
 MARSHALL IS.....(O-31).....KK6
 MARTINIQUE.....(NA-8).....FM7
 MAURITANIA.....(AF-35).....5T5
 MAURITIUS IS.....(AF-39).....3B8
 MAYOTTE.....(AF-39).....FH8
 MEXICO.....(NA-6).....XE, XF
 MIDWAY IS.....(O-31).....KM6
 MINAMI-TORI-SHIMA IS.....(O-27).....JØ1
 MONACO.....(E-14).....3A
 MONGOLIA.....(A-23).....JT1
 MOROCCO.....(AF-33).....CN
 MOZAMBIQUE.....(AF-37).....C9M

NAURU, REPUBLIC OF.....(O-31).....C21
 NAVASSA IS.....(NA-8).....KC4
 NEPAL.....(A-22).....9N1
 NETHERLANDS.....(E-14).....PA-PI
 NETHERLANDS ANTILLES.....(NA-8 & SA-9).....PJ
 NEW CALEDONIA.....(O-32).....FK8
 NEWFOUNDLAND.....(NA-5).....VØ1
 NEW HEBRIDES.....(O-32).....YJ
 NEW ZEALAND.....(O-32).....ZL
 NICARAGUA.....(NA-7).....YN
 NIGER.....(AF-35).....5U7
 NIGERIA.....(AF-35).....5N2
 NIUE IS.....(O-32).....ZK2
 NORFOLK IS.....(O-32).....VK9N
 NORTHERN IRELAND.....(E-14).....GI
 NORWAY.....(E-14).....LA-LJ

OGASAWARA IS.....(A-27).....JØ1
 OKINAWA (RYUKYU IS.).....(A-25).....JR6
 OKINO-TORI-SHIMA.....(O-27).....TJ1
 OMAN, SULTANATE OF.....(A-21).....A4X

PAKISTAN.....(A-21).....AP
 PALMYRA IS.....(O-31).....KP6
 PANAMA.....(NA-7).....HP
 PANTELLERIA IS.....(AF-33).....IH
 PAPUA NEW GUINEA.....(O-28).....P29
 PARAGUAY.....(SA-11).....ZP
 PERU.....(SA-10).....ØA
 PHILIPPINES.....(O-27).....ØU
 PHOENIX IS.....(O-31).....KB6
 PITCAIRN IS.....(O-32).....VR6
 POLAND.....(E-15).....SP
 PORTUGAL.....(E-14).....CT1
 PRINCE EDWARD & MARION IS.....(AF-38).....ZS2
 PUERTO RICO.....(NA-8).....KP4

QATAR.....(A-21).....A7X

REUNION IS.....(AF-39).....FR7
 REVILLA GIGEDO IS.....(NA-6).....XF4
 RHODESIA.....(AF-38).....ZE
 RODRIGUEZ IS.....(AF-39).....3B9
 ROMANIA.....(E-20).....YO
 ROTA.....(O-27).....KG6R
 RWANDA.....(AF-36).....9X

SABAH.....(O-28).....9M6
 SABA IS.....(NA-8).....PJØ, 8
 ST. BRANDON IS.....(AF-39).....3B7
 ST. EUSTATIUS.....(NA-8).....PJ5, 8
 SAINT HELENA IS.....(AF-36).....ZØ7
 SAINT MARTIN IS.....(NA-8).....FS7
 ST. PETER & ST. PAULS ROCKS.....(SA-11).....PYØ
 ST. PIERRE & MIQUELON IS.....(NA-5).....FP8
 SAIPAN.....(O-27).....KG6S
 SAMOA, AMERICAN.....(O-32).....KS6
 SAMOA, WESTERN.....(O-32).....5W1
 SAN ANDRES & PROVIDENCIA.....(NA-7).....HKØ
 SAN FELIX IS.....(SA-12).....CEØX
 SAN MARINO.....(E-15).....M1
 SARAWAK.....(O-28).....9M8
 SARDINIA.....(E-15).....IS
 SAUDI ARABIA.....(A-21).....HZ, TZ
 SAUDI ARABIA/IRAQ

NEUTRAL ZONE.....(A-21).....BZ4
 SCOTLAND.....(E-14).....GM
 SENEGAL REPUBLIC.....(AF-35).....6W8
 SERRANA BK & RONCADOR CAY.....(NA-7).....HKØ
 SEYCHELLES IS.....(AF-39).....S79
 SICILY.....(E-15).....IT
 SIERRA LEONE.....(AF-35).....9L1
 SINGAPORE, REP OF.....(A-28).....9V1
 SINT MAARTEN.....(NA-8).....PJ7, 8
 SOLOMON IS.....(O-28).....H44
 SOMALI REPUBLIC.....(AF-37).....6Ø
 SOUTH AFRICA, REP OF.....(AF-38).....ZØ, ZS1, 2, 4-6
 SOUTH GEORGIA IS.....(SA-13).....VP8
 SOUTH ORKNEY IS.....(SA-13).....LU-Z, VP8
 SOUTH SANDWICH IS.....(SA-13).....CE9AN-AZ, LU-Z, VP8
 S-SHETLAND IS.....(SA-13).....CE9AN-AZ, LU-Z, VP8
 SOUTHWEST AFRICA (NAMIBIA).....(AF-38).....ZØ3, ZS3
 SOUTH YEMAN.....(A-21).....ØD7
 SOVIET UNION:
 EUROPEAN RUSSIAN SOVIET FEDERATED
 SOCIALIST REPUBLIC.....(E-16).....UAL, 2, 3, 4, 6
 ASIATIC RUSSIAN SFSR.....(A-17-19, 23).....JA9, Ø

ARMENIAN S.S.R.....(A-21).....UG6
 AZERBAIDZHAN S.S.R.....(A-21).....ØD6
 ESTONIAN S.S.R.....(E-15).....UR2
 FRANZ JOSEF LAND.....(E-40).....UA1
 GEORGIAN S.S.R.....(A-21).....UF6
 KALININGRADSK.....(E-15).....UA2
 KARELO-FINNISH S.S.R.....(E-16).....UN1
 KAZAKH S.S.R.....(A-17).....UL7
 KIRGHIZ S.S.R.....(A-17).....UM8
 LATVIAN S.S.R.....(E-15).....UQ2
 LITHUANIAN S.S.R.....(E-15).....UP2
 MOLDAVIAN S.S.R.....(E-16).....UØ5
 TADZHIK S.S.R.....(A-17).....UJ8
 TURKMEN S.S.R.....(A-17).....UH8
 UKRAINIAN S.S.R.....(E-16).....UB5
 UZBEK S.S.R.....(A-17).....UI8
 WHITE RUSSIAN S.S.R.....(E-16).....UC2
 SPAIN.....(E-14).....EA
 SPANISH SAHARA.....(A-33).....EA9
 SRI LANKA.....(A-22).....4S7
 SUDAN.....(AF-34).....ST
 SURINAM.....(SA-9).....PZ
 SVALBARD IS.....(E-40).....JW
 SWAN IS.....(NA-7).....HRØ
 SWAZILAND.....(AF-38).....3Ø6
 SWEDEN.....(E-14).....SJ-SM
 SWITZERLAND.....(E-14).....HB
 SYRIA.....(A-20).....YK

TAIWAN.....(A-24).....BV
 TANZANIA.....(AF-37).....5H3
 THAILAND.....(A-26).....HS
 TIBET.....(A-23).....AC4
 TIMOR PORTUGUESE.....(O-28).....3A
 TOGO.....(AF-35).....5V
 TOKELAU IS.....(O-31).....ZM7
 TONGA.....(O-32).....A35
 TRANSKEI.....(AF-38).....S8
 TRINIDADE & MARTIN VAZ IS.....(SA-11).....PYØ
 TRINIDAD & TOBAGO IS.....(SA-9).....9Y4
 TRISTAN DE CUNHA.....(AF-38).....ZØ9
 TROMELIN IS.....(AF-39).....FR7
 TUNISIA.....(AF-33).....3V8
 TURKEY.....(A-20).....TA, TC
 TURKS & CAICOS IS.....(NA-8).....VP5
 TUSCAN ARCHIPELAGO.....(E-15).....IA
 TUVALU IS.....(O-31).....VR8

UGANDA.....(AF-37).....5X5
 UNITED ARAB EMIRATES.....(A-21).....A6X
 UNITED NATIONS, GENEVA.....(E-14).....4U
 UNITED STATES OF AMERICA.....(NA-3, 4, 5).....A, K, N, W
 URUGUAY.....(SA-13).....CX

VATICAN CITY.....(E-15).....HV
 VENEZUELA.....(SA-9).....YV
 VIETNAM.....(A-26).....XV5
 VIRGIN IS.....(NA-8).....KV4
 VOLTAIC REPUBLIC.....(AF-35).....XT2

WAKE IS.....(O-31).....KW6
 WALES.....(E-14).....GW
 WALLIS & FUTUNA IS.....(O-32).....FW8
 WILLIS IS.....(O-30).....VK9Z
 WINDWARD IS:
 DOMINICA.....(NA-8).....VP2Ø
 ST. LUCIA.....(NA-8).....VP2L
 ST. VINCENT & DEPENDENCIES.....(NA-8).....VP2S

YEMEN.....(A-21).....4W
 YUGOSLAVIA.....(E-15).....YU
 YUKON TERRITORY.....(NA-1 TO 5).....VY1

ZAIRE, REPUBLIC OF.....(AF-36).....9Q5
 ZAMBIA.....(AF-36).....9I, 9J
 ZANZIBAR (TANZANIA).....(AF-37).....5H1

If you're having a TVI problem...

this fellow could be the "bearer" of the **SOLUTION...**



Don't let your several thousand dollar investment in a ham station sit idle for the want of a TVI filter

— **let Drake solve the TVI problem.**

Although TVI/RFI is a complex subject, basically it has two forms: (1) Harmonics generated by the transmitter which fall on TV/FM channels. (2) Direct radiation from

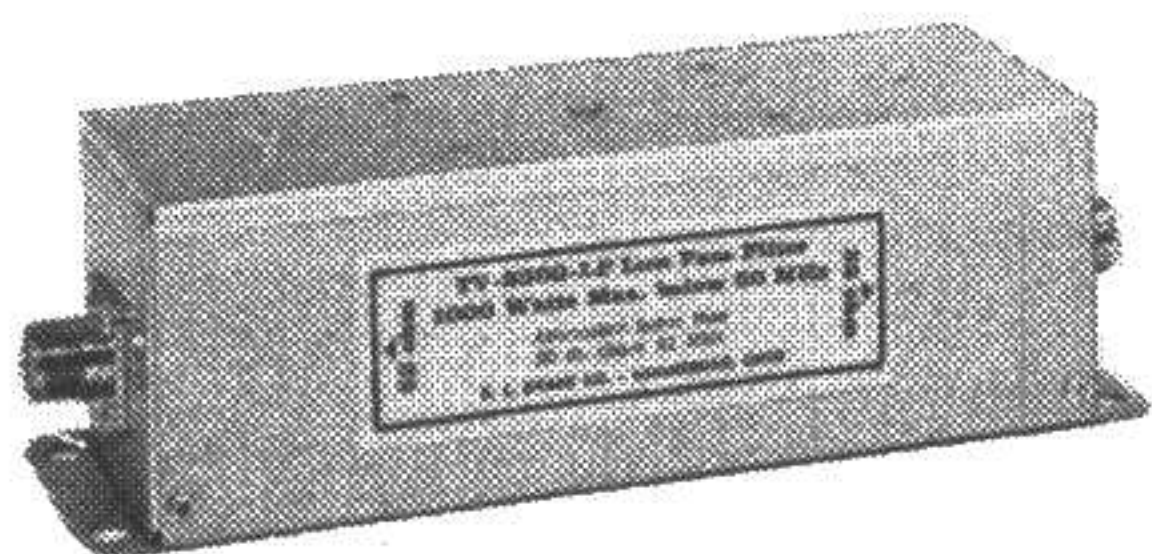
a strong fundamental signal directly into a nearby TV receiver. This is possible because strong signals at ham band frequencies can sneak around the tuned circuits in a TV and cause interference within the set. Even though the signal may be clean, direct radiation interference can occur as far away as several blocks, depending upon your power, antenna system, and the design of the TV.

DRAKE TVI FILTERS ARE THE ANSWER:

"Low Pass" Filters will reduce or eliminate TVI caused by harmonics from amateur transmitters. All transmitters generate some harmonics which might be just strong enough to cause TVI. We believe every station should be equipped with a Low Pass Filter, designed to cut off at 41 MHz, the TV i-f frequency. Drake filters are down 80 dB at 41 MHz to provide maximum protection.

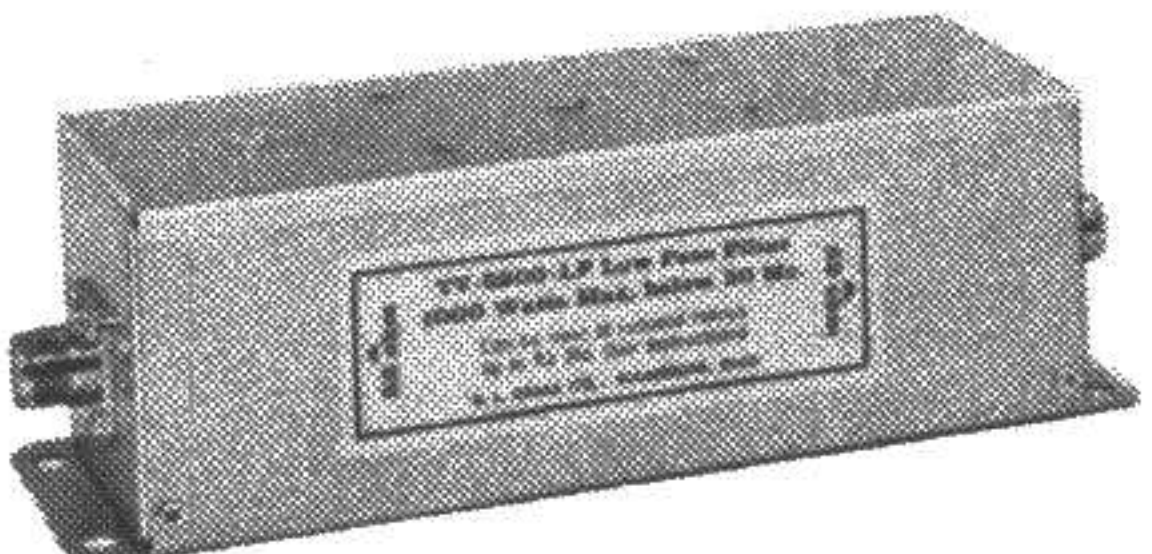
"High Pass" Filters are used to reduce or eliminate direct radiation interference at the TV set. There are less expensive High Pass Filters on the market for the TV set, but do they really work? Drake HP Filters provide 40 dB attenuation below 52 MHz; some others have measured at only 3 to 6 dB down.

HERE ARE THE "BEAR" FACTS:



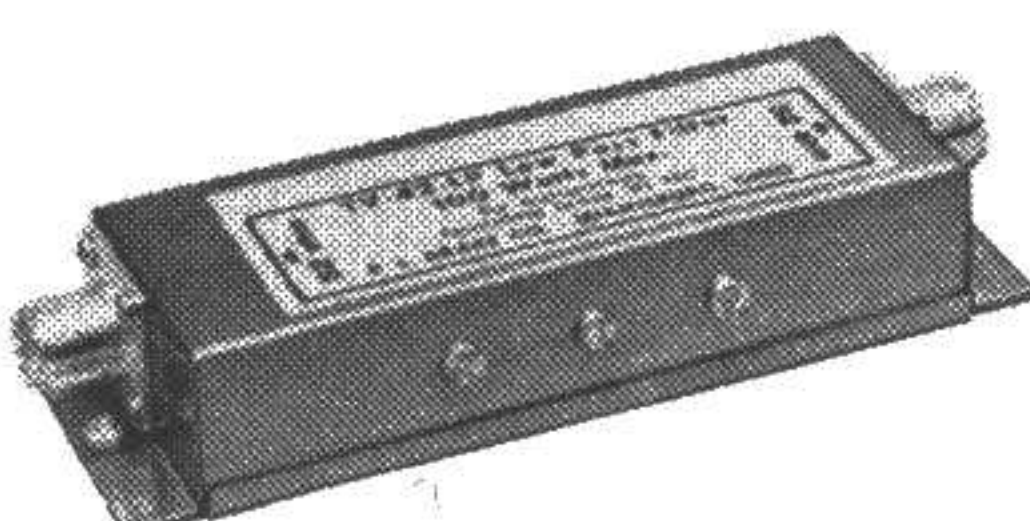
Drake TV-3300-LP

1000 watts max. below 30 MHz. Attenuation better than 80 dB above 41 MHz. Helps TV i-f interference, as well as TV front-end problems.



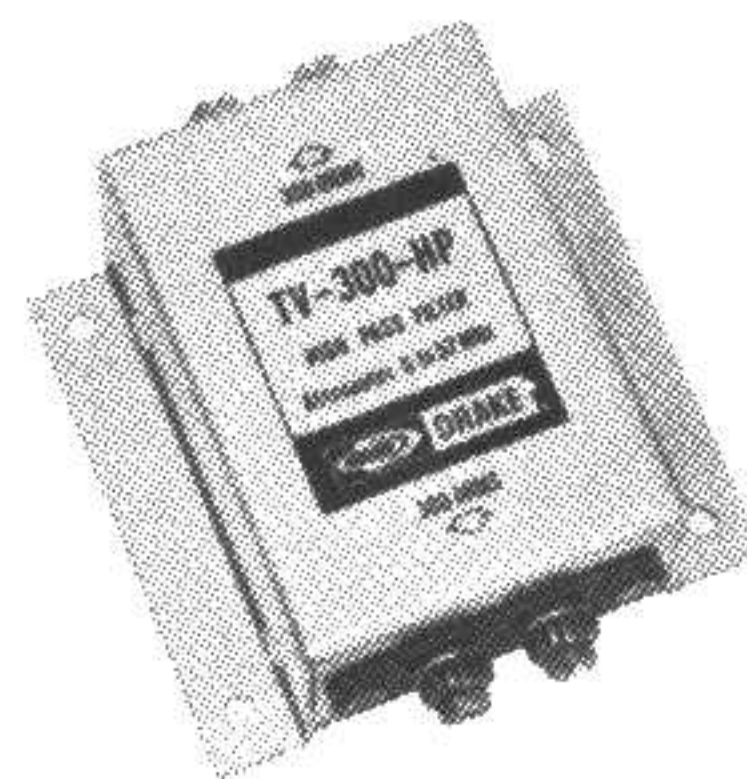
Drake TV-5200-LP

200 watts to 52 MHz. Ideal for six meters. For operation below six meters, use TV-3300-LP or TV-42-LP.



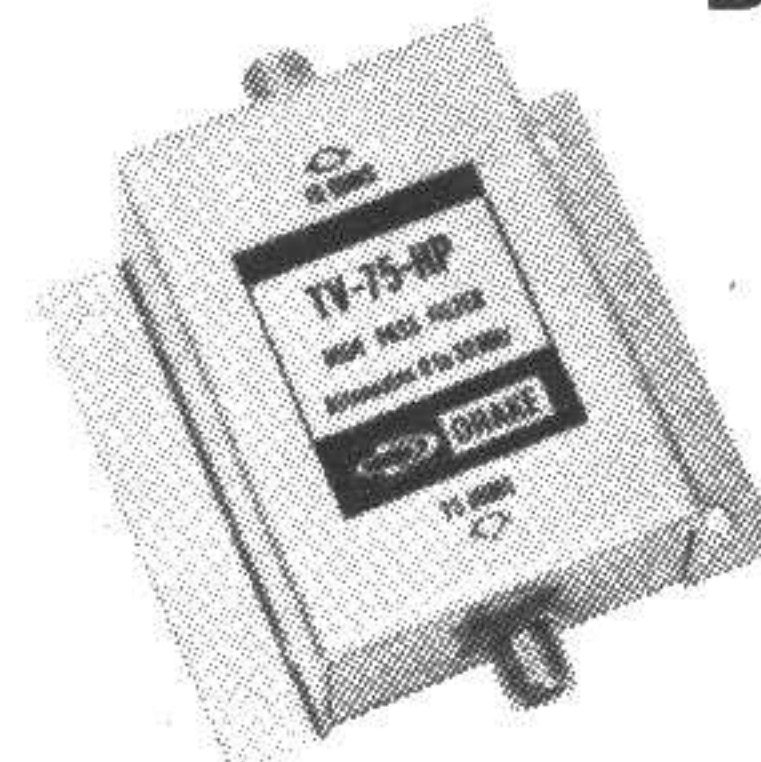
Drake TV-42-LP

For transmitters operating at 30 MHz and lower. Rated 100 watts input.



Drake TV-300-HP

For 300 ohm twin lead. New connectors for "no-strip" installation.



Drake TV-75-HP

For 75 ohm TV coaxial cable; TV type "F" connectors installed. Ideal for master antenna systems for apartments and condominiums.

Certain situations require both a Low Pass and a High Pass Filter to solve the problem, and Drake can provide both types.



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R. L. DRAKE COMPANY



DRAKE

540 Richard St., Miamisburg, Ohio 45342
Phone: (513) 866-2421 • Telex: 288-017

Prices and specifications subject to change without notice or obligation.

INTERNATIONAL RADIO AMATEUR PREFIXES

The following prefixes are listed in alphabetical order for convenience in locating the country when DX calls are heard.

AP.....PAKISTAN	KC4.....NAVASSA IS.	VP5.....TURKS & CAICOS IS.
A2C.....BOTSWANA	KC4AA,KC4US.....ANTARCTICA	VP8.....FALKLAND,S.GEORGIA,S.URKNEY,
A35.....TONGA	KC6.....CAROLINE IS.	S.SANDWICH,S.SHETLAND IS.,GRAHAM LAND
A4X.....SULTANATE OF OMAN	KG4.....GUANTANAMO BAY	VP9.....BERMUDA IS.
A51.....BHUTAN	KG6.....MARIANA IS.	VQ9.....CHAGOS
A6X.....UNITED ARAB EMIRATES	KG6.....GUAM	VR1.....BRITISH PHOENIX,GILBERT & OCEAN IS.
A7X.....QATAR	KG6R.....ROTA	VR3.....NORTHERN LINE IS.
A9X.....BAHRAIN	KG6S.....SAIPAN	VR6.....PITCAIRN IS.
	KH6.....HAWAII & KURE IS.	VR7.....CENTRAL & SOUTHERN LINE IS.
BV.....TAIWAN	KJ6.....JOHNSTON IS.	VR8.....TUVALU IS.
BY.....PEOPLES REPUBLIC OF CHINA	KL7.....ALASKA	VS5.....BRUNEI
	KM6.....MIDWAY IS.	VS6.....HONG KONG
CE.....CHILE	KP4.....PUERTO RICO	VU2.....INDIA
CE9AA-AM.....CHILEAN ANTARCTICA	KP6.....JARVIS & PALMYRA IS.	VU7.....ANDAMAN & NICOBAR IS.
TIERRA DE D'HIGGINS,PALMER PENINSULA,	KS6.....AMERICAN SAMOA	VU7.....LACCADIVE IS.
GRAHAM LAND	KV4.....VIRGIN IS.	
CE9AN-AZ.....SOUTH SHETLAND IS.	KW6.....WAKE IS.	VY1.....YUKON
CE0A.....EASTER IS.	KX6.....MARSHALL IS.	
CE0X.....SAN FELIX IS.	KZ5.....CANAL ZONE	
CE0Z.....JUAN FERNANDEZ IS.		
CM.....CUBA	LA-LJ.....NORWAY	XE,XF.....MEXICO
CM.....MOROCCO	LU.....ARGENTINA	XF4.....REVILLA GIGEDO IS.
CO.....CUBA	LU-2.....ANTARCTICA	XT2.....VOLTAIC REPUBLIC
CP.....BOLIVIA	LX.....LUXEMBOURG	XU.....CAMBODIA/KHMER REPUBLIC
CR3.....GUINEA BISSAU	LZ.....BULGARIA	XV5.....VIETNAM
CR9.....MACAO		XW8.....LAOS
CT1.....PORTUGAL		XZ.....BURMA
CT2.....AZORES IS.	M1.....SAN MARINO	
CT3.....MADEIRA IS.		
CX.....URUGUAY	N.....UNITED STATES OF AMERICA	YA.....AFGHANISTAN
C21.....REPUBLIC OF NAURU		YB-YD.....INDONESIA,TIMOR IS.
C31.....ANDORRA	OA.....PERU	YI.....IRAQ
C5A.....GAMBIA	OD5.....LEBANON	YJ.....NEW HEBRIDES
C6A.....BAHAMA IS.	OE.....AUSTRIA	YK.....SYRIA
C9M.....MOZAMBIQUE	OH.....FINLAND	YN.....NICARAGUA
	OH0.....ALAND IS.	YD.....ROMANIA
DA-DL.....FED REP OF WEST GERMANY	OJ0, OH0M.....MARKET REEF	YS.....EL SALVADOR
DM.....EAST GERMAN DEMOCRATIC REP.	OK,OL.....CZECHOSLOVAKIA	YU.....YUGOSLAVIA
DU.....PHILIPPINES	ON.....BELGIUM	YV.....VENEZUELA
D2A.....ANGOLA	OR.....ANTARCTICA	YV0.....AVES IS.
D4.....REP OF CAPE VERDE	OX.....GREENLAND	
D6.....STATE OF COMORO	OY.....FAEROES IS.	
	OZ.....DENMARK	
EA.....SPAIN	PA-PI.....NETHERLANDS	ZA.....ALBANIA
EA6.....BALEARIC IS.	PJ.....NETHERLANDS ANTILLES	ZB2.....GIBRALTAR
EA8.....CANARY IS.	PJ2,9.....CURACAO	ZD7.....SAINT HELENA IS.
EA9.....SPANISH SAHARA,CEUTA Y MELILLA	PJ3,9.....ARUBA	ZD8.....ASCENSION IS.
EJ.....IRELAND	PJ4,9.....BONAIRE	ZD9.....TRISTAN DA CUNHA & GOUGH IS.
EJ0.....ARAN IS.	PJ5,0.....ST. EUSTATIUS	ZE.....RHODESIA
EL,SL.....LIBERIA	PJ6,8.....SABA IS.	ZF1.....CAYMAN IS.
EP.....IRAN	PJ7,8.....SINT MAARTEN	ZK1.....COOK & MANIHIKI IS.
ET3.....ETHIOPIA	PP-PY.....BRAZIL	ZK2.....NIUE IS.
	PY0.....FERNANDO DE NORONHA IS.	ZL.....NEW ZEALAND &
F.....FRANCE	PY0.....ST.PETER & ST.PAUL'S ROCKS	AUCKLAND,CAMPBELL,CHATHAM,KERMADEC IS.
F88W.....CROZET IS.	PY0.....TRINIDADE & MARTIN VAZ IS.	ZL5.....ANTARCTICA
F88X.....KERGUELEN IS.	PZ.....SURINAM	ZM7.....TOKELAU IS.
F88Y.....ANTARCTICA	P29.....PAPUA NEW GUINEA	ZP.....PARAGUAY
F88Z.....AMSTERDAM & ST.PAUL IS.		ZR,ZS1,2,4,5,6.....REPUBLIC OF SOUTH AFRICA
FC.....CORSICA		ZS1ANT.....ANTARCTICA
FG7.....GUADELOUPE	SJ-SM.....SWEDEN	ZS2.....PRINCE EDWARD & MARION IS.
FH8.....MAYOTTE	SP.....POLAND	ZR,ZS3.....SOUTHWEST AFRICA (NAMIBIA)
FK8.....NEW CALEDONIA	ST.....SUDAN	
FM7.....MARTINIQUE	SV.....EGYPT	3A.....MONACO
F08.....FRENCH POLYNESIA,CLIPPERTON IS.	SV5.....CRETE,GREECE	3B6.....AGALEGA IS.
FP8.....ST.PIERRE & MIQUELON IS.	SV5.....DODECANESE IS.	3B7.....ST. BRANDON IS.
FR7.....GLOUSIO,JUAN DE NOVA,REUNION,	SZ,S3.....BANGLADESH	3B8.....MAURITIUS IS.
TROMELIN IS.	S7.....SEYCHELLES IS.	3B9.....RODRIGUEZ IS.
FS7.....ST. MARTIN IS.	S8.....TRANSKEI	3C.....EQUATORIAL GUINEA
FW8.....MALLIS & FUTUNA IS.	S9.....DEM REP OF ST THOMAS & PRINCEPE	3D2.....FIJI IS.
FY7.....FRENCH GUIANA		3D6.....SWAZILAND
		3V8.....TUNISIA
G.....ENGLAND	TA,TC.....TURKEY	3X.....REPUBLIC OF GUINEA
GD.....ISLE OF MAN	TF.....ICELAND	3Y.....BOUVET IS.
GI.....NORTHERN IRELAND	TG.....GUATEMALA	
GJ.....JERSEY	TI.....COSTA RICA	4K1.....ANTARCTICA
GM.....SCOTLAND	TI9.....COCOS IS.	4S7.....SRI LANKA
GU.....BAILIWICK OF GUERNSEY	TJ.....CAMEROON	4U.....UNITED NATIONS,GENEVA
GW.....WALES	TL8.....CENTRAL AFRICAN REPUBLIC	4W.....YEMEN
	TM8.....REPUBLIC OF CONGO	4X4,4Z4.....ISRAEL
HA,HG.....HUNGARY	TR8.....GABON REPUBLIC	
HB.....SWITZERLAND	TT8.....REPUBLIC OF CHAD	5A.....LIBYAN ARAB REPUBLIC
HB0.....LIECHTENSTEIN	TU2.....IVORY COAST	5B4,ZC4.....CYPRUS
HC.....ECUADOR	TY.....PEOPLES REPUBLIC OF BENIN	5H1.....ZANZIBAR,TANZANIA
HC8.....GALAPAGOS IS.	TZ.....MALI REPUBLIC	5H3.....TANZANIA
HG.....HUNGARY		5L.....LIBERIA
HH.....HAITI	UA1,2,3,4,6.....EUROPEAN RUSSIAN	5K2.....NIGERIA
HI.....DOMINICAN REPUBLIC	SOVIET FEDERATED SOCIALIST REPUBLIC	5R8.....MALAGASY REPUBLIC
HK.....COLOMBIA	UA9,0.....ASIATIC RUSSIAN S.S.R.	5T5.....MAURITANIA
HK0.....BAJO NUEVO,MALPELO,SAN ANDRES &	UA1.....FRANZ JOSEF LAND	5U7.....NIGER
PROVIDENCIA IS.	UA2.....KALININGRADSK	5V.....TOGO
HK0.....SERRANA BANK & RONCADOR CAY	UB5.....UKRAINIAN S.S.R.	5W1.....WESTERN SAMOA
HM,HL9.....KOREA	UC2.....WHITE RUSSIAN S.S.R.	5X5.....UGANDA
HP.....PANAMA	UD5.....AZERBAIDZHAN S.S.R.	5Z4.....KENYA
HR.....HONDURAS	UF6.....GEORGIAN S.S.R.	
HR0.....SWAN IS.	UG6.....ARMENIAN S.S.R.	60.....SOMALI REPUBLIC
HS.....THAILAND	UH8.....TURKMEN S.S.R.	60A.....SENEGAL REPUBLIC
HV.....VATICAN CITY	UI8.....UZBEK S.S.R.	6Y5.....JAMAICA
HZ,7Z.....SAUDI ARABIA	UJ8.....TADZHIK S.S.R.	
H4.....SOLOMON IS.	UL7.....KAZAKH S.S.R.	7J.....OKINO-TORI-SHIMA
H5.....REP OF BOPHUTHATSWANA	UMB.....KIRGHIZ S.S.R.	70.....SOUTH YEMEN & KAMARAN IS.
	UN1.....KARELO-FINNISH S.S.R.	7P8.....LESOTHO
I.....ITALY	UO5.....MOLDAVIAN S.S.R.	7T7.....MALAWI
IA.....TUSCAN ARCHIPELAGO	UP2.....LITHUANIAN S.S.R.	7X.....ALGERIA
IC.....CAPRI & ISCHIA IS.	UQ2.....LATVIAN S.S.R.	7Z.....SAUDI ARABIA
IG9.....LAMPEDUSA IS.	UR2.....ESTONIAN S.S.R.	
IH.....PANTELLERIA IS.		8J.....ANTARCTICA
IM.....MADDALENA IS.	VE.....CANADA	8P6.....BARBADOS IS.
IS.....SARDINIA	VK.....AUSTRALIA	8Q6.....MALDIVE IS.
IT.....SICILY	VK2.....LORD HOWE IS	8R.....GUYANA
	VK9N.....NORFOLK IS	8Z4.....SAUDI ARABIA/IRAQ NEUTRAL ZONE
JA,JE-JJ,JR.....JAPAN	VK9X.....CHRISTMAS IS	
JD1.....OGASAWARA,MINAMI-TORI-SHIMA IS.)	VK9Y.....COCOS IS	9G1.....GHANA
JR6.....OKINAWA (RYUKYU IS.)	VK9Z.....WILLIS IS	9H1,5.....MALTA
JT1.....MONGOLIA	VK0.....ANTARCTICA	9H4.....GOZO (MALTA)
JW.....SVALBARD IS.	VO1.....NEWFOUNDLAND	9I,9J.....ZAMBIA
JX.....JAN MAYEN IS.	VO2.....LABRADOR	9K2.....KUWAIT
JY.....JORDAN	VPI.....BELIZE	9L1.....STIERRA LEONE
JZ.....REP OF DJIBOUTI	VP2.....LEEWARD & WINDWARD IS.	9M2.....WEST MALAYSIA
J3.....GRENADA & DEPENDENCIES	VP2A.....ANTIGUA,BARBUDA	9M6.....SABAH
	VP2D.....DOMINICA	9M8.....SARAWAK
K.....UNITED STATES OF AMERICA	VP2E.....ANGUILLA	9N1.....NEPAL
KA.....U.S.PERSONNEL IN JAPAN	VP2K.....ST KITTS,NEVIS	9Q5.....REPUBLIC OF ZAIRE
KB6.....BAKER,CANTON,FENDERBURY,	VP2L.....ST LUCIA	9U5.....BURUNDI
HOWLAND & PHOENIX IS.	VP2M.....MONTSERRAT	9X.....RWANDA
	VP2S.....ST VINCENT & DEPENDENCIES	9Y4.....TRINIDAD & TOBAGO IS.
	VP2V.....BRITISH VIRGIN IS.	

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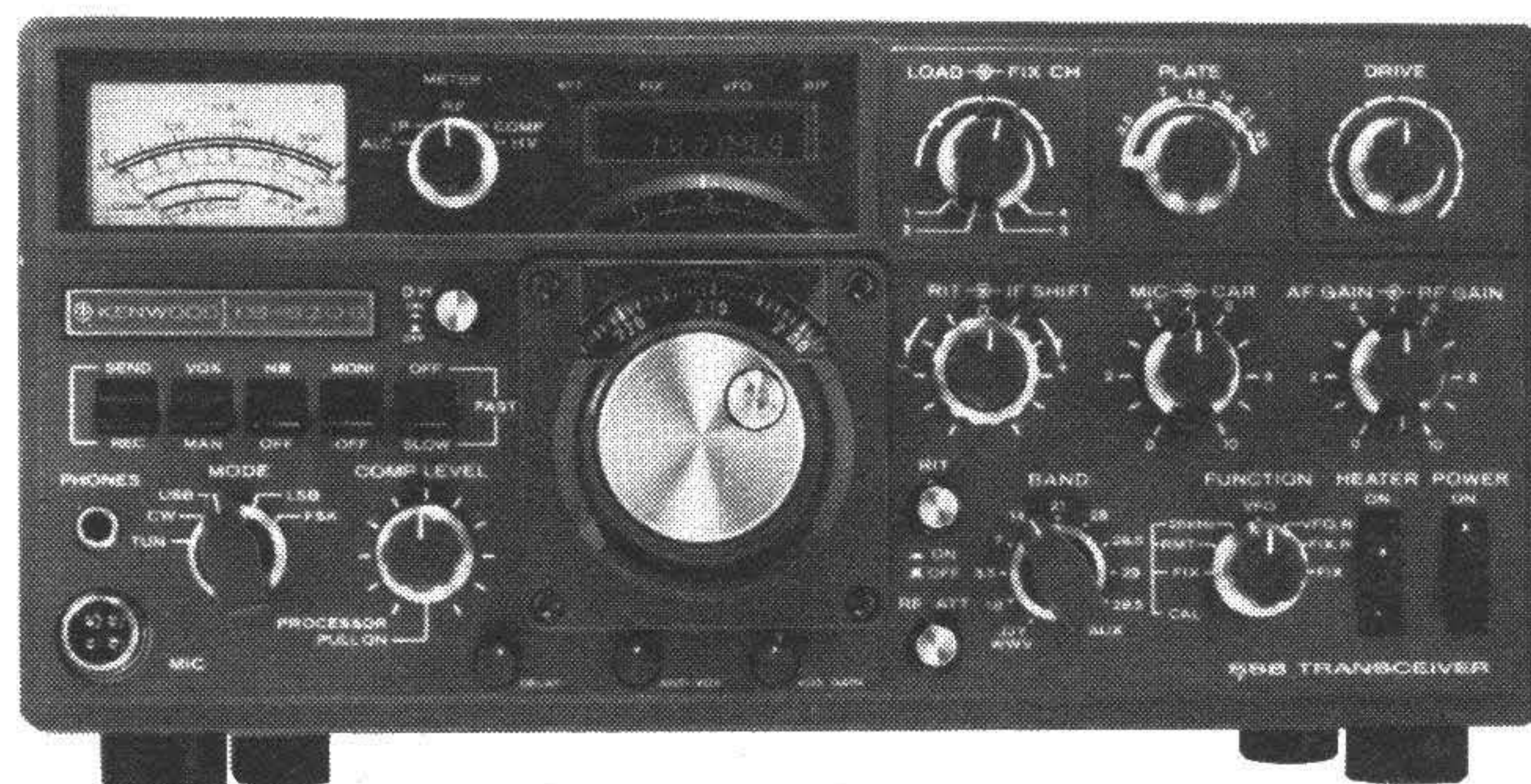
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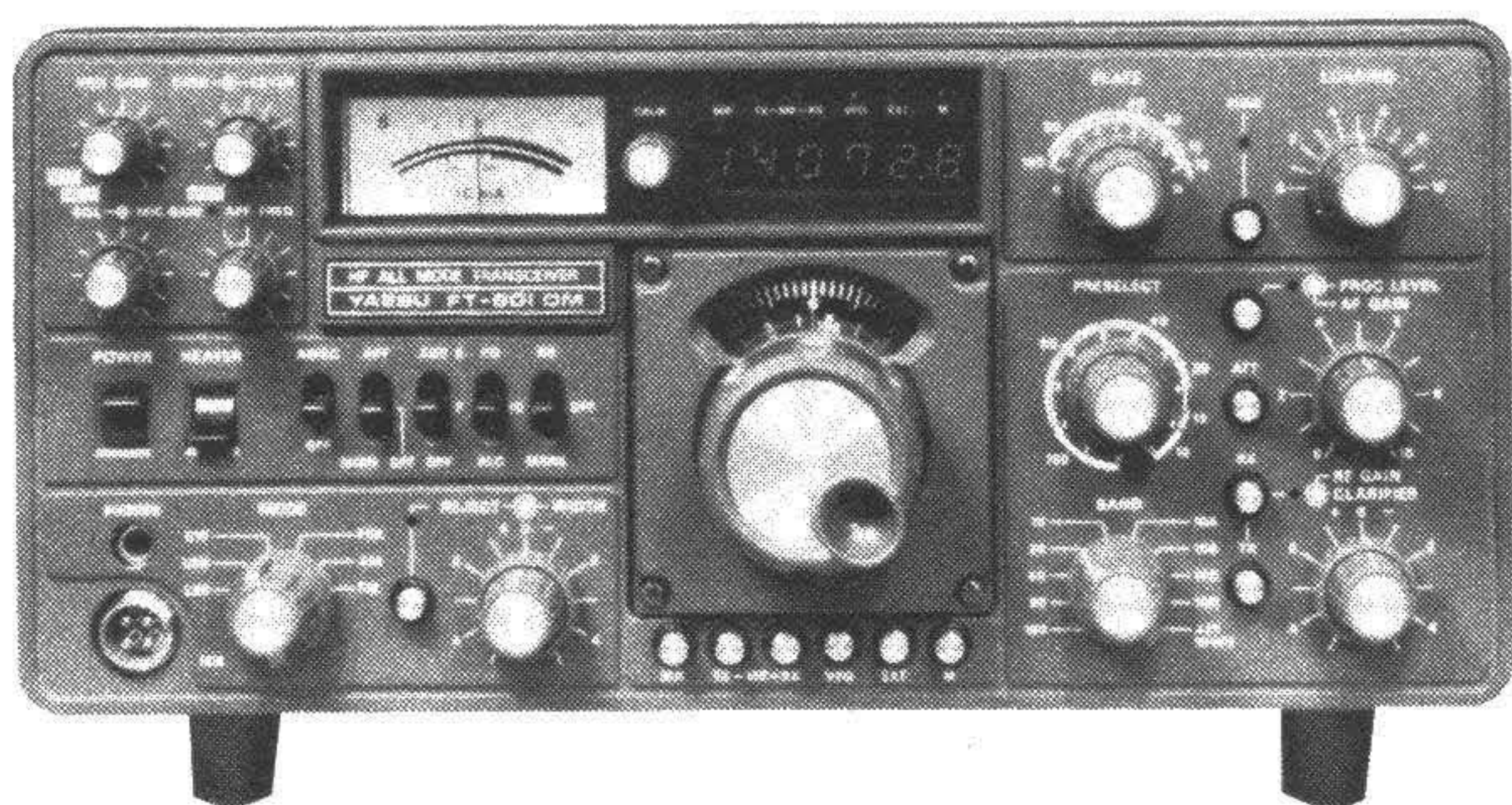
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A. R. R. L. Countries List

The ARRL Postwar Countries List is the official standard used in connection with the DX Century Club. To qualify for the DX Century Club Award, an applicant must submit confirmations from at least 100 different countries contacted after November 15, 1945, in accordance with the Postwar DXCC Rules. Copies of the DXCC Rules will be furnished by ARRL on request.

A2.....	BUTSWANA	KJ,KH3.....	JOHNSTON IS.	VP8,LU-Z.....	SO. SANDWICH IS.
A3.....	REP. OF TONGA	KL7.....	ALASKA	VP8,LU-Z,CE9AA-AZ.....	SO. SHETLAND IS.
A4X.....	OMAN	KM,KH4.....	MIDWAY IS.	VP9.....	BERMUDA IS.
A5.....	BHUTAN	KP4.....	PUERTO RICO	VQ9.....	CHAGOS IS.
A6X.....	UNITED ARAB EMIRATES	KP6,KH5K.....	KINGMAN REEF	VR1.....	BRITISH PHOENIX IS.
A7X.....	QATAR	KP6,KH5.....	PALMYRA, JARVIS IS.	VR1.....	GILBERT & OCEAN IS.
A9X.....	BAHREIN	KS4,KP3.....		VR3,7.....	LINE IS.
AP.....	PAKISTAN	HK0.....	SERRANA BANK & RONCADOR CAY	VR6.....	PITCAIRN IS.
EV.....	TAIWAN	KS6,KH8.....	AMERICAN SAMOA	VR7 (SEE VR3)	
BY.....	CHINA	KV,KP2.....	VIRGIN IS.	*VR8.....	TUVALU
C2.....	REP. OF NAURU	KW,KH9.....	WAKE IS.	V55.....	BRUNEI
C3.....	ANDORRA	KX.....	MARSHALL IS.	V56.....	HONG KONG
C5.....	THE GAMBIA	KZ.....	CANAL ZONE	V59 (SEE 8Q)	
C6.....	BAHAMA IS.	LA,LB,LF,LG,LJ.....	NORWAY	V59K.....	KAMARAN IS.
C9.....	MOZAMBIQUE	LA (SEE CE9AA-AM)		VU.....	INDIA
CE.....	CHILE	LU.....	ARGENTINA	VU7.....	ANDAMAN & NICOBAR IS.
CE9AA-AM,FB8Y,KC4,LA,LU-Z,OR4,UA1,UK1,		LU-Z (SEE CE9AA-AM,VP8)		VU7.....	LACCADIVE IS.
VK0,VP8,ZL5,ZS1,3Y,4K,8J.....	ANTARCTICA	LX.....	LUXEMBOURG	W (SEE K)	
CE9AN-AZ (SEE VP8)		LZ.....	BULGARIA	XE.....	MEXICO
CE0A.....	EASTER IS.	*M1 (SEE 9A)		XF4.....	REVILLA GIGEDO
CE0X.....	SAN FELIX	OA.....	PERU	XP (SEE 0X)	
CE0Z.....	JUAN FERNANDEZ	OD.....	LEBANON	*XT.....	VOLTAIC REP.
CM,CO.....	CUBA	OE.....	AUSTRIA	XU.....	KHMER REP.
CN.....	MOROCCO	OH.....	FINLAND	XV.....	VIETNAM
CP.....	BOLIVIA	OH0.....	ALAND IS.	XW.....	LUA PEOPLE'S DEM. REP.
CR3.....	GUINE BISSAU	OJ0.....	MARKET	XZ.....	BURMA
CR9.....	MACAO	OK.....	CZECHOSLOVAKIA	YA.....	AFGHANISTAN
CT.....	PORTUGAL	ON.....	BELGIUM	*YB,YC.....	INDONESIA
CT2.....	AZORES	OR4 (SEE CE9AA-AM)		YI.....	IRAQ
CT3.....	MADEIRA IS.	OX,XP.....	GREENLAND	YJ.....	NEW HEBRIDES
CX.....	URUGUAY	OY.....	FAROE IS.	YK.....	SYRIA
*DA,DF,DJ,DK.....		OZ.....	DENMARK	YN.....	NICARAGUA
DL.....	FEDERAL REPUBLIC OF GERMANY	*P2.....	PAPUA NEW GUINEA	YU.....	ROMANIA
*DM,DT.....	GERMAN DEMOCRATIC REPUBLIC	PA,PD,PE,PI.....	NETHERLANDS	YS.....	SALVADOR
DU.....	PHILIPPINE IS.	PJ.....	NETHERLAND ANTILLES	YU.....	YUGOSLAVIA
D2,D3.....	ANGOLA	PJ.....	ST. MAARTEN, SABA & ST. EUSTATIUS	YV.....	VENEZUELA
D4.....	CAPE VERDE IS.	PY.....	BRAZIL	YV0.....	AVES IS.
*D5.....	COMOROS	PY0.....	FERNANDO DE NORONHA	ZA.....	ALBANIA
EA.....	SPAIN	PY0.....	ST. PETER & ST. PAUL'S ROCKS	ZB.....	GIBRALTAR
EA6.....	BALLARIC IS.	PY0.....	TRINIDADE & MARTIN VAZ IS.	ZC (SEE 5B)	
EA8.....	CANARY IS.	PZ.....	SURINAM	ZD7.....	ST. HELENA
EA9.....	CEUTA AND MELILLA	SK,SL,SM.....	SWEDEN	ZD8.....	ASCENSION IS.
EI.....	REPUBLIC OF IRELAND	SP.....	POLAND	ZD9.....	TRISTAN DA CUNHA & GOUGH IS.
EL.....	LIBERIA	ST.....	SUDAN	ZF.....	RHODESIA
EP.....	IRAN	ST0.....	SOUTHERN SUDAN	ZF.....	CAYMAN IS.
ET.....	ETHIOPIA	SU.....	EGYPT	ZK1.....	SD. COOK IS.
F.....	FRANCE	SV.....	CRETE	ZK1.....	NU. COOK IS.
FBW.....	CROZET	SV.....	DUDECANESE	ZK2.....	NIOE
FBX.....	KERGUELEN IS.	SV.....	GREECE	ZL.....	AUCKLAND IS. & CAMPBELL IS.
FBY (SEE CE9AA-AM)		SV.....	MOUNT ATHOS	ZL.....	CHATHAM IS.
FBZ.....	AMSTERDAM & ST. PAUL IS.	SZ.....	BANGLADESH	ZL.....	KERMADEC IS.
*FC.....	CORSICA	SZ.....	SIYHELLES	ZL.....	NEW ZEALAND
FG.....	GUADELOUPE	S9,CR5.....	SAD TOME & PRINCE	ZL5 (SEE CE9AA-AM)	
*FG,FS.....	SAINT MARTIN	TA.....	TURKEY	ZM7.....	TOKELAU
*FH.....	MAYOTTE	TF.....	ICELAND	ZP.....	PARAGUAY
FK.....	NEW CALEDONIA	TG.....	GUATEMALA	ZS1,2,4,5,6.....	SOUTH AFRICA
FM.....	MARTINIQUE	TI.....	COSTA RICA	ZS1 (SEE CE9AA-AM)	
FO.....	CLIPPERTON IS.	TI9.....	LUCOS IS.	ZS2.....	PRINCE EDWARD & MARION IS.
FO.....	FR. POLYNESIA	TJ.....	CAMEROUN	ZS3.....	(NAMIBIA) SOUTHWEST AFRICA
FP.....	ST. PIERRE & MIQUELON	*TL.....	CENTRAL AFRICAN REP.	*IS.....	SPRATLY IS.
*FR.....	GLORIOSO IS.	*TN.....	CONGO REP.	3A.....	MONACO
*FR.....	JUAN DE NOVA, EUROPA	*TR.....	GABON REP.	3A6,7.....	AGALEGA & ST. BRANDON
FR.....	REUNION	*TT.....	CHAD REP.	3A8.....	MAURITIUS
FR.....	TROMELIN	*TU.....	IVORY COAST	3B9.....	RODRIGUEZ IS.
FW.....	WALLIS & FUTUNA IS.	*TY.....	BENIN	3C.....	EQUATORIAL GUINEA
FY.....	FRENCH GUIANA	*TZ.....	MALI REP.	3C0.....	ANNOUN
G.....	ENGLAND	UA;UK1,3,4,6;UV;UW1-6;UN1		3D2.....	FIJI IS.
GC,GU.....	GUERNSEY & DEPENDENCIES	UA1,UK1 (SEE CE9AA-AM)	KALININGRAJSK	3D6.....	SWAZILAND
GC,GJ.....	JERSEY	UA2,UK2F.....	ASIATIC R.S.F.S.R.	3V.....	TUNISIA
GI.....	ISLE OF MAN	UA,UK,UV,UW9,0.....	UKRAINE	3X.....	REP. OF GUINEA
GL.....	NORTHERN IRELAND	UB,UK,UT,UY5.....	WHITE R.S.S.R.	3Y.....	BOUVET
GM.....	SCOTLAND	UC2,UK2A/C/I/L/O/S/4.....	ARMENIA	4K (SEE CE9AA-AM)	
GN.....	WALES	UD6,UK6C/D/K.....	TURKMAN	45.....	SRI LANKA
HA.....	HUNGARY	UF6,UK6F/D/J/V.....	GEORGIA	4J.....	I.T.U. GENEVA
HB.....	SWITZERLAND	UG6,UK6G.....	ARMENIA	4JUN.....	UN HQ. NEW YORK
H30.....	LIECHTENSTEIN	UH8,UK8H.....	UZBEK	4W.....	YEMEN
HC.....	ECUADOR	UI8,UK8.....	TADZHIK	4X,4Z.....	ISRAEL
HCB.....	GALAPAGOS IS.	UJ8,UK8J/R.....	KAZAKH	5A.....	LIBYA
HH.....	HAITI	UL7,UK7.....	KIRGHIZ	5B,ZC.....	CYPRUS
HI.....	DOMINICAN REPUBLIC	UM8,UK8M,N.....	MOLDAVIA	5H.....	TANZANIA
HK.....	COLUMBIA	UP2,UK2B/P.....	LITHUANIA	5N.....	NIGERIA
HK0.....	BAJO NULVO	UQ2,UK2G/Q.....	LATVIA	5R.....	MALAGASY REP.
HK0.....	MALPELO IS.	UR2,UK2R/T.....	ESTONIA	*ST.....	MAURITANIA
HK0.....	SAN ANDRES & PROVIDENCIA	VE,VO.....	CANADA	*SU.....	NIGER REP.
HK0 (SEE KS4)		VE1.....	SABLE IS.	5V.....	TOGO REP.
HL,HH.....	KOREA	VE1.....	ST. PAUL IS.	5W.....	WESTERN SAMOA
HP.....	PANAMA	VK.....	AUSTRALIA	5X.....	UGANDA
HR.....	HONDURAS	VK9.....	LORD HOWE IS.	5Z.....	KENYA
HS.....	THAILAND	VK9.....	WILLIS IS.	60.....	SOMALI REP.
HV.....	VATICAN	VK9.....	CHRISTMAS IS.	*6W.....	SENEGAL REP.
HZ,TZ.....	SAUDI ARABIA	VK9.....	COCOS IS.	6Y.....	JAMAICA
H4,VR4.....	SOLOMON IS.	VK9.....	MELLISH REEF	70.....	PEOPLE'S DEM. REP. OF YEMEN
I,IT.....	ITALY	VK9.....	NORFOLK IS.	7P.....	LESOTHO
IS.....	SARDINIA	VK0 (SEE CE9AA-AM)		7Q.....	MALAWI
JA,JE,JG,JH,JR,KA.....	JAPAN	VK0.....	HEARD IS.	7X.....	ALGERIA
*JD,KAL.....	MINAMI TORISHIMA	VK0.....	MACQUARIE IS.	7Z (SEE HZ)	
*JD,KAL.....	OGASAWARA	VO (SEE VE)		8J (SEE CE9AA-AM)	
*JD.....	OKINO TORI-SHIMA	VP1.....	BELIZE	8P.....	BARBADOS
JT.....	MONGOLIA	*VP1.....	ANTIGUA, BARBUDA	8Q,V59.....	MALDIVES
JW.....	SVALBARD	*VP20.....	DOMINICA	8R.....	GUYANA
JX.....	JAN MAYEN	*VP2F.....	ANGUILLA	8Z4.....	SAUDI ARABIA/IRAQ NEUTRAL ZONE
JY.....	JORDAN	*VP2K.....	ST. KITTS, NEVIS	*9A, (ML).....	SAN MARINO
K,W,N.....	UNITED STATES OF AMERICA	*VP2L.....	ST. LUCIA	*9C.....	GHANA
KH1.....	BAKER, HOWLAND & AMERICAN PHOENIX IS.	*VP2M.....	MONTSERRAT	9H.....	MALTA
KC4 (SEE CE9AA-AM)		*VP2S.....	ST. VINCENT & DEPENDENCIES	9J.....	ZAMBIA
KC4,KP1.....	NAVASSA IS.	*VP2V.....	BRITISH VIRGIN IS.	9K.....	KUWAIT
KC6.....	EASTERN CAROLINE IS.	VP5.....	TURKS & CAICOS IS.	9L.....	SIERRA LEONE
KC6.....	WESTERN CAROLINE IS.	VPB (SEE CE9AA-AM)		*9M2.....	WEST MALAYSIA
KG4.....	GUANTANAMO BAY	VP8.....	FALKLAND IS.	*9M6,8.....	EAST MALAYSIA
KG6,KH2.....	GUAM	VP8,LU-Z.....	SO. GEORGIA IS.	9N.....	NEPAL
KG6R,S,T.....	MARIANA IS.	VP8,LU-Z.....	SO. ORKNEY IS.	9P.....	REP. OF ZAIRE
KH6.....	HAWAIIAN IS.			*9Q.....	BURUNDI
KH7.....	KURE IS.			*9V.....	SINGAPORE
				*9X.....	RWANDA
				9Y.....	TRINIDAD & TOBAGO

**Because K6SSS
loves DX,
his neighbors sent him
on a little expedition.**



One neighbor sued him for interfering with Lawrence Welk. Another filed a complaint about that "monstrosity" in his backyard—a tribander at 40 feet.

7,781 tangled with the law

The K6SSS case is an example of what can happen to you these days. No matter where you live. It is hypothetical. But real lawsuits are being fought right now by people like K50VC, W2LTP, WB7NOM, W8NRM and W6UFJ/N6QQ to name a few. Last year nearly 8,000 unsuspecting hams and CB'ers ran afoul of the law. Sure, they're taking their fight to court—but they're losing! Never mind that they've got building permits for their towers. Or that the FCC says their rigs are "clean." Judges are ruling against them. The alarming part is that every suit lost makes it that much easier to nail the next guy. Prosecuting attorneys love to cite recent adverse decisions during a trial.

Legal ammunition available

The tragedy is that suits are being lost that could have been won. But TVI/RFI and tower cases fall into a little-known area of the law. Unless your lawyer is a specialist, he could spend hundreds of hours researching court decisions. And still not be sure he's put together the strongest defense possible. It's expensive (expect to spend an average \$4,000 to \$8,000 if you're sued). And risky. Which is why we formed the non-profit Personal Communications Foundation*. To provide your lawyer with legal ammunition.

Who we are

We're a handful of ham lawyers, professors and judges (all volunteers) who wanted to help before it's too late. We're putting together the first research library of personal communications and zoning law. And having briefs written by the best legal brain. It's all available to your lawyer. For 10¢ a page. We can't guarantee you'll win. We can't try the case for you. But if you or your lawyer contacts us, we'll sure make sure you get a fighting chance.

(space donated by the publisher)

Give us a fighting chance

To be even more successful in future battles, we're building an arsenal of weapons to use in court. For example, we're commissioning a study by real estate experts on the effect of a backyard tower on neighborhood property values. The pricetag is a stiff \$11,000. But without the study, more cases will be lost. And more dangerous precedents will be set.

We are winning. But it takes money to keep fighting. You can help us fight by sending a check. The ARRL did. Think of us as your insurance policy against a lawsuit. All checks are 100% tax-deductible.

Please act today. We've already got a late start.

*Non-profit Cal. membership corp. #788-085

Kenneth S. Widelitz, WA6PPZ, President
Personal Communications Foundation*
Suite 1504
10960 Wilshire Blvd.
Los Angeles, CA 90024 (213) 478-1749

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☐ Full member \$25 ☐ Associate member \$10

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call

address

city

state

zip

PCF 

Personal Communications Foundation

Defending the rights of hams

CENSUS OF AMATEUR RADIO LICENSES* in the U.S.A.

by classes, within states and call areas

YL's
(Included
in state
totals)

Call Area	State	Novice	Tech-nician	Con-ditional	General	Advanced	Extra	Club	Military	Repeaters	State totals	YL's
#1	Conn.	1,230	893	277	1,829	1,305	514	103	5	76	6,232	330
	Maine	392	219	208	636	405	149	16	4	27	2,056	132
	Mass.	1,890	2,612	200	3,554	2,416	795	155	13	117	11,752	639
	N.H.	404	460	87	674	480	165	21	2	26	2,319	156
	R.I.	266	479	38	483	288	98	23	5	19	1,699	92
	Vermont	138	103	72	282	191	63	15	0	6	870	60
		4,320	4,766	882	7,458	5,085	1,784	333	29	271	24,928	1,409
#2	N.J.	1,928	3,149	137	3,908	3,225	1,086	289	5	127	13,854	585
	New York	4,539	5,312	307	7,340	5,856	1,702	351	19	268	25,694	1,341
		6,467	8,461	444	11,248	9,081	2,788	640	24	395	39,548	1,926
#3	Delaware	160	154	20	253	186	80	7	2	10	872	45
	D.C.	45	40	10	138	115	55	13	5	2	423	13
	Md.	1,087	1,111	98	1,948	1,928	646	90	16	61	6,985	314
	Pa.	2,886	3,501	271	5,205	3,755	1,157	208	27	188	17,198	920
		4,178	4,806	399	7,544	5,984	1,938	318	50	261	25,478	1,292
#4	Alabama	928	1,101	251	1,415	1,080	280	34	9	86	5,184	358
	Florida	3,055	3,577	722	5,364	4,402	1,080	113	13	187	18,513	1,279
	Georgia	1,176	1,138	301	1,772	1,342	396	57	8	69	6,259	360
	Kentucky	907	832	182	1,135	738	202	37	3	63	4,099	271
	N.C.	1,277	1,224	333	2,046	1,541	409	63	6	101	7,000	418
	S.C.	478	444	354	873	654	198	61	7	35	3,104	185
	Tenn.	1,419	1,577	246	1,705	1,564	370	58	5	111	7,055	449
	Virginia	1,284	1,183	277	2,330	2,014	707	57	22	66	7,940	349
		10,524	11,076	2,666	16,640	13,335	3,642	480	73	718	59,154	3,669
#5	Arkansas	445	491	155	753	599	170	36	2	43	2,694	196
	La.	793	722	267	1,249	1,006	285	58	8	47	4,435	286
	Miss.	433	403	138	666	516	128	9	4	45	2,342	140
	N.M.	328	319	216	608	534	185	17	5	33	2,245	140
	Okla.	721	890	171	1,208	1,092	281	42	8	60	4,473	304
	Texas	3,354	3,905	1,110	5,993	4,995	1,313	167	17	298	21,152	1,493
		6,074	6,730	2,057	10,477	8,742	2,362	329	44	526	37,341	2,559
#6	Calif.	6,737	10,126	1,351	14,154	12,814	3,239	588	50	682	49,741	2,941
#7	Arizona	780	1,198	264	1,536	1,478	371	46	6	65	5,744	428
	Idaho	341	235	167	440	351	93	18	0	19	1,664	115
	Montana	260	100	209	378	303	83	19	0	18	1,370	103
	Nevada	225	231	159	399	288	111	19	2	32	1,466	90
	Oregon	1,112	793	336	1,877	1,424	359	60	5	54	6,020	410
	Utah	348	393	73	529	476	127	23	5	32	2,006	115
	Wash.	1,539	1,475	486	2,987	2,389	697	80	14	117	9,784	699
	Wyoming	143	88	103	197	132	41	9	1	17	731	48
		4,748	4,513	1,797	8,343	6,841	1,882	274	33	354	28,785	2,008
#8	Michigan	2,928	2,719	358	4,279	2,860	723	114	8	130	14,119	810
	Ohio	3,855	5,120	213	5,686	3,832	915	204	11	246	20,082	1,234
	W. Va.	764	437	72	763	456	148	20	5	36	2,701	183
		7,547	8,276	643	10,728	7,148	1,786	338	24	412	36,902	2,227
#9	Illinois	3,102	3,627	600	5,148	3,623	943	257	7	148	17,455	1,007
	Indiana	1,872	2,111	176	2,500	1,698	441	122	3	84	9,007	589
	Wisc.	1,237	1,003	318	1,962	1,442	364	77	5	85	6,493	336
		6,211	6,741	1,094	9,610	6,763	1,748	456	15	317	32,955	1,932
#10	Colorado	1,047	812	265	1,564	1,287	401	43	6	98	5,523	387
	Iowa	1,034	691	183	1,545	1,243	254	74	6	61	5,091	303
	Kansas	961	553	314	1,327	961	258	40	8	60	4,482	311
	Minn.	1,107	852	344	1,992	1,501	449	88	3	67	6,403	304
	Missouri	1,475	1,205	303	2,245	1,657	480	97	6	91	7,559	497
	Nebraska	584	389	183	860	635	121	39	3	35	2,849	180
	N.Dakota	177	58	170	269	172	29	11	1	10	897	65
	S.Dakota	221	103	98	322	244	59	14	1	21	1,083	91
		6,606	4,663	1,860	10,124	7,700	2,051	406	34	443	33,887	2,138
KH6	Hawaii	290	220	97	491	537	164	22	21	17	1,859	88
KL7	Alaska	353	160	75	442	390	139	12	37	15	1,623	151
KP4	Puerto Rico	471	439	29	234	289	79	12	7	18	1,578	98

Grand total 50
states, D.C. and
Puerto Rico

64,526 70,977 13,394 107,493 84,709 23,602 4,208 441 4,429 373,779 22,438

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FEDERAL COMMUNICATIONS COMMISSION EXAMINATION POINTS

Examinations for commercial and amateur radio operator licenses are conducted at the following F.C.C. field offices on the days designated by the Engineer in Charge of each office. Specific dates should be obtained from the Engineer in Charge.

OFFICE LOCATION

ALASKA, ANCHORAGE 99510
US POST OFFICE BLDG-ROOM G63
4TH & G STREET, P O BOX 644

CALIFORNIA, LONG BEACH 90807
3711 LONG BEACH BLVD-SUITE 501

CALIFORNIA, SAN DIEGO 92101
1245 7TH AV - FOX THEATRE BLDG

CALIFORNIA, SAN FRANCISCO 94111
323A CUSTOMHOUSE - 555 BATTERY ST

COLORADO, DENVER 80202
1405 CURTIS ST
THE EXECUTIVE TOWER - SUITE 2925

DIST OF COLUMBIA - WASHINGTON, DC 20554
1919 -M- ST NW - ROOM 411

FLORIDA, MIAMI 33130
919 FEDERAL BLDG - 51 SW 1ST AV

FLORIDA, TAMPA 33602
809 BARNETT BK BLDG - 1000 ASHLEY ST

GEORGIA, ATLANTA 30309
440 MASSELL BLDG, 1365 PEACHTREE ST NE

GEORGIA, SAVANNAH 31402
238 FEDERAL OFFICE BLDG & COURTHOUSE
125 BULL ST - P O BOX 8004

HAWAII, HONOLULU 96813
7304 PRINCE JONAH KUHIO
KALANIANA'OLE BLDG, 300 ALA MOANA BLVD

ILLINOIS, CHICAGO 60604
3935 FEDERAL BLDG - 230 S DEARBORN ST

LOUISIANA, NEW ORLEANS 70130
829 F EDWARD HEBERT FEDERAL BLDG
600 SOUTH STREET

MARYLAND, BALTIMORE 21201
GEORGE M FALLON FEDERAL BLDG - ROOM 819
31 HOPKINS PLAZA

MASSACHUSETTS, BOSTON 02109
1600 CUSTOMHOUSE - 165 STATE STREET

MICHIGAN, DETROIT 48226
1054 FEDERAL BLDG & US COURTHOUSE
231 W LAFAYETTE STREET

MINNESOTA, ST PAUL 55101
691 FEDERAL BLDG - 316 N ROBERT STREET

MISSOURI, KANSAS CITY 64106
1703 FEDERAL BLDG - 601 E 12TH STREET

NEW YORK, BUFFALO 14202
1307 FEDERAL BUILDING
111 W HURON ST AT DELAWARE AV

NEW YORK, NEW YORK 10014
201 VARICK STREET

OREGON, PORTLAND 97204
1782 FEDERAL OFFICE BLDG
1220 SW 3RD AV

PENNSYLVANIA, PHILADELPHIA 19106
11425 JAMES A BYRNE FEDERAL COURTHOUSE
601 MARKET STREET

PUERTO RICO, HATO REY 00918
FEDERAL BLDG & COURTHOUSE - ROOM 747
AVENIDA CARLOS CHARDON

TEXAS, BEAUMONT 77701
323 FEDERAL BLDG - 300 WILLOW STREET

TEXAS, DALLAS 75242
EARLE CABELL FEDERAL BLDG - ROOM 13E7
1100 COMMERCE STREET

TEXAS, HOUSTON 77002
5636 FEDERAL BLDG - 515 RUSK AVENUE

VIRGINIA, NORFOLK 23502
MILITARY CIRCLE, 870 N MILITARY HIGHWAY

WASHINGTON, SEATTLE 98174
3256 FEDERAL BLDG - 915 2ND AV

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QNC All net stations Copy.
I have a message for all net stations.

QND* Net is Directed (controlled by net control station).

QNE* Entire net please stand by.

QNF Net is Free (not controlled).

QNG Take over as net control station.

QNH Your net frequency is High.

QNI Net stations report In.*
I am reporting into the net.

QNJ Can you copy me? Can you copy ?

QNK* Transmit messages for to

QNL Your net frequency is Low.

QNM* You are QRMing the net. Please stand by.

QNN Net control station is *
What station has net control?

QNO Station is leaving the net.

QNP Unable to copy you (or).

QNQ* Move frequency to . . . and wait for . . . to finish
handling traffic. Then send him traffic for

QNR* Answer . . . and Relay (or Receive) traffic.

QNS Following Stations are in the net.* (Follow with list).
Request list of stations in the net.

QNT Leaving net Temporarily (or for . . . minutes).

QNU* The net has traffic for YOU. Stand by.

QNV* Establish contact with on this frequency.
If successful, move to . . . and send him traffic for . . .

QNW How do I route messages for ?

QNX You are excused from the net.*
Request to be excused from the net.

QNY* Shift to another frequency (or to . . . kc.)
to clear traffic with

QNZ Zero beat your signal with mine.

*For use only by Net Control Station

Notes on the Use of QN Signals

- The QN signals listed above are special ARRL signals for use in amateur c.w. nets only. Other meanings that may be used in other services do not apply.
- Some QN signals are for use by net control stations only; these are marked with an asterisk (*). Others have slightly different meanings when used by the NCS and net stations; in this case, the meaning when used by the NCS is marked with an asterisk (*).
- Some QN signals have two meanings, the difference depending on how or by whom used. Examples: (a) QNC, when used as a preface to transmission of a message, carries its first meaning; when used by a station reporting into the net (e.g., W9NCS DE W9NET QNI QNC), it carries its second meaning. (b) QNI, when used by the NCS, is a request for stations to report in; when used by a net station, it means that this station is reporting in. (c) QNJ, when used alone, carries its first meaning; when followed by a call, it carries the second meaning.
- QN signals are never followed by a question mark, even though the meaning may be interrogatory.
- Do not use QN signals on phone nets. Say it with words.
- Use QN signals in nets only. They are not for use in casual amateur conversation.
- Make frequent use of standard international "Q" signals in traffic nets, for meanings not covered by QN signals. Examples: QRU, QRV, QSV, QTA, QTB, QTX, etc.

ARRL Communications Department

ARRL Adopted ICAO Phonetic Alphabet

(International Civil
Aviation Organization)

A ALFA
B BRAVO
C CHARLIE
D DELTA
E ECHO
F FOXTROT
G GOLF
H HOTEL
I INDIA
J JULIETT
K KILO
L LIMA
M MIKE
N NOVEMBER
O OSCAR
P PAPA
Q QUEBEC
R ROMEO
S SIERRA
T TANGO
U UNIFORM
V VICTOR
W WHISKEY
X X-RAY
Y YANKEE
Z ZULU

ON GOOD PHONE OPERATING

- Listen much . . . with care.** Avoid distractions in your operating room. Tune the band well after each call.
- Time your calls; monitor your own frequency.** Call only when a station is free.
- Make short calls, with breaks to listen.** Speak clearly, at a steady, modest rate. Three short calls are better than one long one.
- Use push-to-talk technique . . . speak near the mike.** Watch the modulation indicator. Keep local background noise at a minimum.
- Make notes. Avoid missing points for comment.** Jot down topics to avoid repeats.
- Talk in connected thoughts and phrases.** Notes will help avoid mixing up subjects. Push-to-talk technique will keep brother amateurs from calling you a monologist.
- Speak naturally.** QSOs need not be cut and dried. Make them interesting. Avoid exhibitionism. Use proper operating form to promote efficiency in communication and add respect and prestige for your station.

Use of this standard list is recommended by ARRL. Haphazard selection of words often results in confusion. A degree of uniformity in use of phonetic words reflects favorably on your individual operating, and on the whole amateur service.

American Radio Relay League
225 Main Street
Newington, Conn. 06111

DX OPERATING CODE

(For W/VE Amateurs)

Some amateur DXers have caused considerable confusion and QRM in their efforts to work DX stations. The points below, if observed by all W/VE amateurs, will help make DX more enjoyable for all.

1. Call DX only after he calls CQ, QRZ? or signs SK, or 'phone equivalents thereof. Make your calls short.
2. Do not call a DX station:
 - a. On the frequency of the station he is calling until you are sure the QSO is over (SK).
 - b. Because you hear someone else calling him.
 - c. When he signs KN, AR or CL.
 - d. Exactly on his frequency.
 - e. After he calls a directional CQ, unless of course you are in the right direction or area.
3. Keep within frequency band limits. Some DX stations can get away with working outside, but you cannot.
4. Observe calling instructions given by DX stations.
Example: "15U" means "call 15 kc. up from my frequency".
"15D" means down, etc.
5. Give honest reports. Many DX stations depend on W/VE reports for adjustment of station and equipment.
6. Keep your signal clean. Key clicks, ripple, feedback or splatter give you a bad reputation and may get you a citation from FCC.
7. Listen and call the station you want. Calling CQ DX is not the best assurance that the rare DX will reply.
8. When there are several W or VE stations waiting, avoid asking DX to "listen for a friend". Also avoid engaging him in a rag chew against his wishes.

(For Overseas Amateurs)

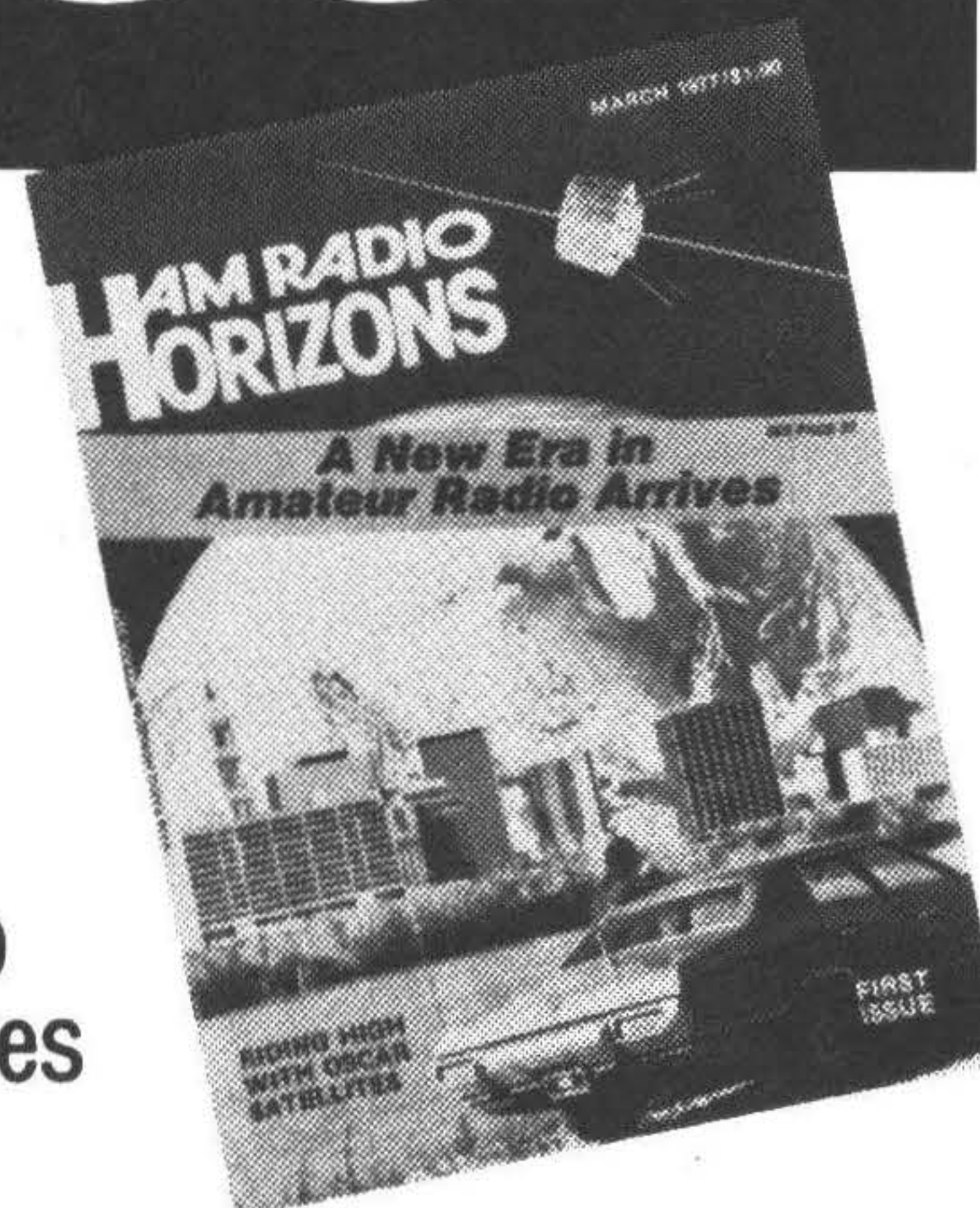
To all overseas amateur stations:

In their eagerness to work you, many W and VE amateurs resort to practices which cause confusion and QRM. Most of this is good-intentioned but ill-advised; some of it is intentional and selfish. The key to the cessation of unethical DX operating practices is in your hands. We believe that your adoption of certain operating habits will increase your enjoyment of amateur radio and that of amateurs on this side who are eager to work you. We recommend your adoption of the following principles:

1. Do not answer calls on your own frequency.
2. Answer calls from W/VE stations only when their signals are of good quality.
3. Refuse to answer calls from other stations when you are already in contact with someone, and do not acknowledge calls from amateurs who indicate they wish to be "next".
4. Give everybody a break. When many W/VE amateurs are patiently and quietly waiting to work you, avoid complying with requests to "listen for a friend".
5. Tell listeners where to call you by indicating how many kilocycles up (U) or down (D) from your frequency you are listening. Examples: c.w. - "CQ DX CQ DX CQ DX 15U DE AC4YN AC4YN AC4YN 15U K"; 'phone - "Answer 15 kilocycles up from my frequency".
6. Use the ARRL-recommended ending signals, especially KN, to indicate to impatient listeners the status of the QSO. (KN means "Go ahead (specific station), all others keep out".
7. Let it be known that you avoid working amateurs who are constant violators of the above principles.

ARRL Communications Department

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TELEGRAPHERS' ABBREVIATIONS IN CURRENT USE

— denotes short space, as in American Morse o, ee; c, te; &, es.
— denotes letters sent together, as in ar, sent —.

- A -

aa..... all after
ab..... all before
abl..... able
abt..... about
ads, adr..... address
adv..... advise
af..... Africa
aftmn..... afternoon
agn..... again
ahd..... ahead
alng..... along
am..... amplitude modulation
ani..... any
anr..... another
ant..... antenna
app..... appreciate
ar..... end of message
as, as m..... wait, wait a minute
au..... fractions follow
aw..... auf wiedersehn (Ger), see you later

- B -

b..... be
b4..... before
balun..... balanced-to-unbalanced
bc, bcl..... broadcast, broadcast listener
bcnu..... be seeing you
bd..... buenos dias (Sp), bad
bda..... birthday
be, bo, bth..... both, as in "u5 be", up both (Morse)
bfo..... beat frequency oscillator
bjr..... bon jour (Fr)
bk, bkg..... back, break, black, book, breaking
bkr..... breaker, circuit-breaker
bn..... been, brown, between, buenas noches (Sp)
bq..... answer to rq (request)
brg, brng..... bearing, heading
bsr..... bon soir (Fr)
btr..... better
buk..... book

- C -

c..... yes
cd..... card, could
cd, cud, cdnt..... could, couldn't
cfm, cfm..... confirm, confirming
ck..... check
ckt, cct..... circuit
cl, clg..... call, calling, closed
clbk..... callbook
clix..... clicks
clr..... clear
cndx, condx, cdx..... conditions
cnt, cnti, cnty..... count, county
cnvn..... convention
coz, cos, cuz, becuz..... because
cpi..... copy
cq..... general call to all stations
cs..... call sign, call letters
cua, cuagn..... see you again
cul..... see you later
cum, cm, cmg..... come, coming
cupla..... a couple of
cw..... continuous wave, manual keying

- D -

da..... day
dbl..... double
dcn..... direction
dct..... direct
de..... from
df..... direction finder
dif, diff..... difference
dlr, dld..... dealer, deliver, delivered
dn, d..... down (in frequency)
dnt, dmi..... do not, don't mention it
dpe..... dope, information
dr..... dear
ds..... thanks, danke schon (Ger)
dsnt..... does not
dsw..... goodbye, do svidaniya (Russian)
dunno..... don't know
dx..... distance, or rare station
dxpdn..... dx expedition

- E -

em..... old man
eh..... ?
el, els..... antenna element(s)
em..... them
eni, enibdi, enihw..... any, anybody, anyhow
ere..... here
es, es..... and (from Morse "&")
eta..... estimated time of arrival
etd..... estimated time of departure
eu..... Europe

- F -

fb, vfb..... fine business, good (enthusiastic approval)
fd..... field day, feed, food
fer..... for
fiver..... QSA-5
fld..... field, filed
flr..... floor
fm, frm..... from, frequency modulation
fnd..... friend, find, found
fni..... funny
foxes..... teleprinter test tapes
freq, fq..... frequency
fwd..... forward
fyi..... for your information

- G -

ga..... good afternoon, go ahead
gb..... good bye
gd..... good day, good
ges, gess..... guess
gg..... going
gl..... good luck

- G - (Cont.)

gld..... glad
gn, gng..... gone, green, going
gnd..... ground
gotta..... got to, have to, must
gp..... ground plane, group (word)
grs..... groups (as in msg code groups)
gud..... good
gtgs..... greetings
gv, gvg..... give, giving

- H -

hd, hrd..... had, hard, heard
hdg..... heading, antenna azimuth
hed..... he would
hi..... high, laughter, (sometimes: !)
hlo..... hello
hlv..... hasta la vista (Sp), see you later
hpe, hpg..... hope, hoping
hpi..... happy
hpn, wa hpn..... happen, what happened
hq, hqtrs..... headquarters
hr, hrg, hrs..... here, hear, hour, hearing, here is, hours
hv, hvnt, hvg..... have, haven't, having
hvi..... heavy
hw, hws..... how? how is?

- I -

i?..... ready? here goes the tape
id..... I would
ie..... clear? (response: i-go, e-wait)
im..... I'm, him, intermodulation
imf..... ?
info..... information
irpt..... I repeat

- K -

k..... go ahead, end of transmission
ka..... beginning of transmission (formal)
klix..... clicks
klvb..... que (ke) le vaya bien (Sp)
"That it goes well with you"
kn..... go ahead, but only the station(s) called,
I will answer no other calls, known
knw..... know

- L -

lkg..... looking
ll..... landline, telephone or telegraph
lng..... long
lotsa..... lots of
lp..... long path (long way around earth)
lsn..... listen
ltr..... letter, later
lv, lvg..... leave, leaving
lw..... long wave, "lone wolf" (independent DXer)

- M -

mag, rag..... magazine
mci, mci bcp..... merci, merci beaucoup (Fr), thanks
mgr..... manager
mi..... my
mil, mill, ma..... milliamperes, typewriter
min..... minute, minimum
mk..... mark (opposite of space)
ml, mlg..... mail, mailing
mng..... morning, meaning
mni..... many
mnl..... manual
mo..... moment
msg..... message

- N -

n..... no
nd..... nothing doing
ng..... no good
nil..... nothing
nir..... lazy "nil"
nm..... nothing more, no more
nn..... noon
no..... know
nr..... near, number
nvr..... never
nw..... now

- O -

ob, eeb..... old boy
oc..... old chap
ok, eek..... all correct
ol..... old lady
om, eem..... old man
op, opr..... operator
opn, opg..... operation, operating
ot..... old timer

- P -

pa..... power amplifier
pbl, pbli..... probable, preamble, probably
pctcs..... practices
pd..... period, paid
pdc..... pure dc, clean note
pkg..... package, parking
pls..... pleasure
pgn..... propagation
ppl..... people
prtbl..... portable
pse, pls, psd..... please, pleased
psbl, psbli..... possible, possibly
psn, posn..... position
pt, ptd, ptg..... point, part, pointed, pointing
pwr..... power

- Q -

qhm..... tuning from high frequency to middle of band
qlf..... try sending with left foot awhile
qlm..... tuning from low frequency to middle of band
qlz..... operator too lazy
qmh..... tuning from middle frequency to high frequency
qml..... tuning from middle frequency to low frequency
qmt..... try mailing your tlc
qmn..... man-made electrical noise
qsl..... mail card confirming qso
qsl..... send card after receiving mine
qst..... of interest to all amateurs

- R -

r..... received
rac..... rectified ac
rc..... rag chew
rcd, recd..... received
rcr, recr, rcvr, rx..... receiver
rd..... read (copy), red
rdi, rdy..... ready
rdo..... radio, radio station
re..... concerning
reg, regs..... regular, regulations
rito..... righto
rm..... room
rng..... running
rockbound, rockbnd..... crystal controlled, no vfo
rpt..... report, repeat
rq..... request
rst..... readability 1-5, strength 1-9, tone 1-9

- S -

sa, sez, sed, sa..... say, says, said, South America
sae..... self-addressed envelope
sase..... self-addressed stamped envelope
sb, ssb..... single sideband
sgd..... signed
shd, shud, shudn't..... should, shouldn't
sig, sigs..... signal(s), signature
simo..... simultaneously
sked..... schedule
sl..... see you later
sn..... soon, seen, signal/noise
sp..... short path (the closer great-circle path)
sri..... sorry
ss..... sweepstakes
ssn..... season, as in "ssns gtgs"
stn..... station
su..... I'll see you
sum..... some
sumbdi..... somebody
svc..... service
svl..... several
sw..... switch, short wave
sx..... dollar sign "\$"

- T -

tbl, trbl..... trouble
tfc..... traffic, messages
thr..... there, their
tmw..... tomorrow
tng..... tuning, thing
tnk..... think
tnsmns..... transmission
tr..... transit, position, there, transmit/receive
T/R..... transmit/receive
trix..... tricks
tt, tts..... that, that is
tu, tku, tnx, tks..... thank you, thanks
tv, tvi..... television, television interference
twx..... telegram
tx, trans..... transmitter

- U -

u, up..... you, upward in frequency
ufb..... vfb, very fine business (Rus)
uk..... United Kingdom
ul, ud..... you will, you would
undld..... undelivered
unhrd..... unheard
ur, urs..... your, yours
ut..... universal time, GMT, "Zebra" time

- V -

va..... signing off (same as sk)
vert..... vertical
vfb..... very fine business
vfo..... variable-frequency oscillator
vjo..... viejo (Sp), old man
vox..... voice-operated switch
vy, vri..... very
vxo..... variable crystal oscillator

- W -

w, wt..... watt
wa..... word after
wat, watsa..... what, what do you say?
wb..... word before
wd..... word, would
wee..... who?
wed..... we would
wh..... white
wid..... with
wilco..... will comply, will do
wk, wkg..... week, weak, work, working, QSOing
wri..... worry
wx, wea..... weather

- X -

xtl..... crystal
xtr, xmtr..... transmitter
xq..... fill, or repeat of unreceived copy

- Y -

yda..... yesterday
yl, xyl..... young lady, married young lady
yr..... year, your

- Z -

z..... Greenwich Mean Time, UT, "zebra"
zedder..... New Zealander
zi..... zone of the interior (continental USA)
zilch..... nothing

NUMBER CODE: 1 - a 6 - 6
2 - u 7 - b
3 - v 8 - d
4 - 4 9 - n
5 - e 0 - t

73..... best wishes
88..... love and kisses
99 (rare)..... keep out

TELEGRAPH CODES

CONTINENTAL CODE	MORSE CODE
Used in ham radio	Used on land lines in United States and Canada
<p>A B C D E F G H I J K L M N O P Q R S T U V W X Y Z</p> <p>There are no space letters in the Continental Code</p> <p>Figures</p> <p>Punctuation</p>	<p>A B C D E F G H I J K L M N O P Q R S T U V W X Y Z &</p> <p>C, O, R, Y, Z and & are composed of dots and spaces T is a short dash L is a longer dash Zero (0) is usually abbreviated to T</p> <p>Figures</p> <p>Punctuation</p>

EMERGENCY SIGNAL

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THESE ARE THE POSTAL RATES IN EFFECT AT PRESS TIME OF THIS ISSUE.

	U.S. and Possessions, Canada, Mexico	Central America, Columbia, Venezuela, Caribbean	South America, Europe, Africa, Asia, Oceania
Surface postcard (QSL)	10 ¢	14 ¢	14 ¢
Surface letter (1 ounce)	15 ¢	20¢*	20¢*
Additional ounces up to 13 ozs.	13 ¢		
Air postcard (QSL)		21¢	21¢
Air letter (1 ounce)		25¢**	31¢***
Additional ounces up to 9 oz.		(each ½ oz)	(each ½ oz.)
Aerogramme		22 ¢	22 ¢

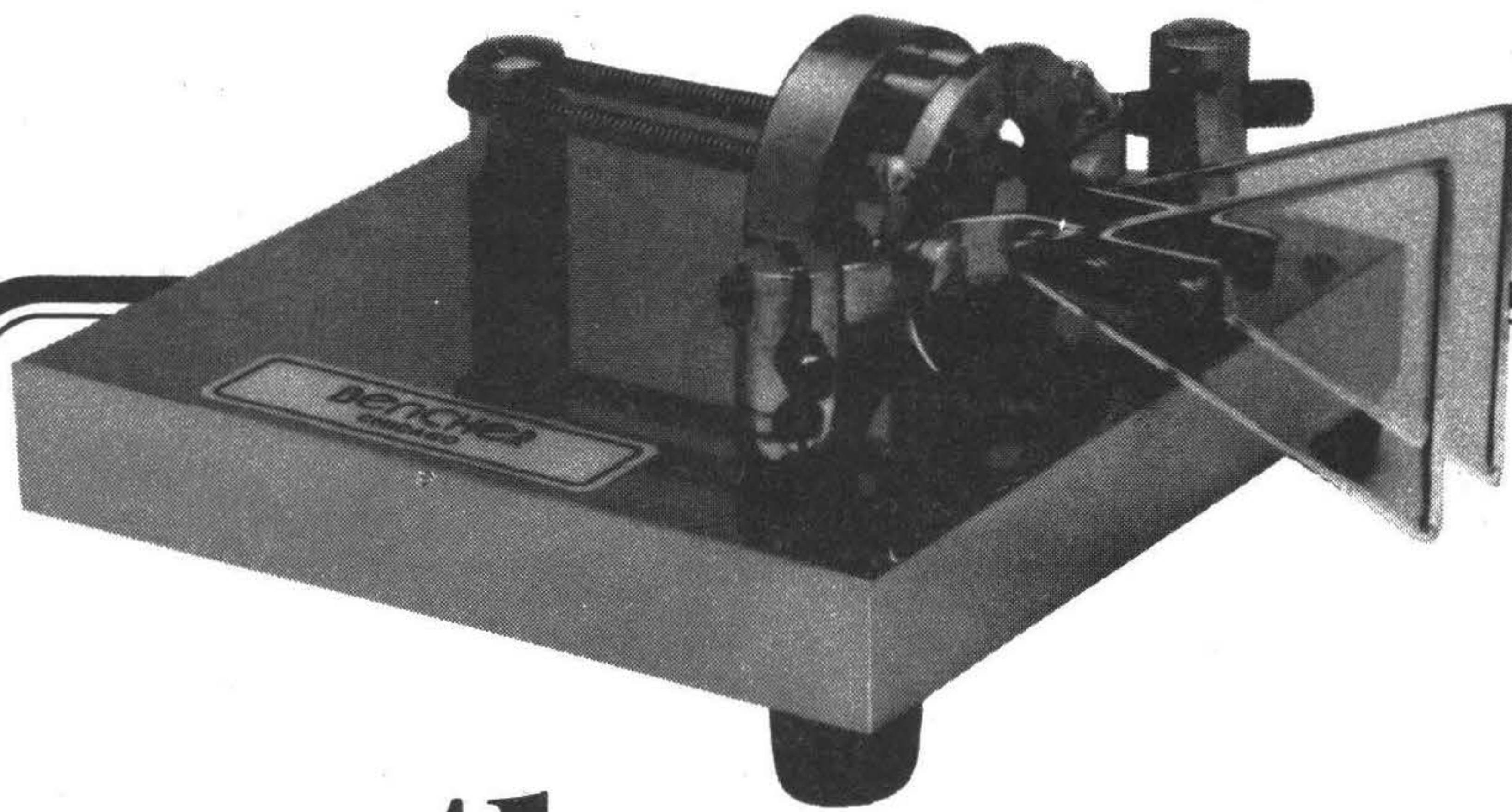
*Over 1 up to 2 oz. 36¢, over 2 up to 4 oz. 48¢, over 4 up to 8 oz. 96¢, over 8 oz. up to 1 lb. \$1.84, over 1 lb. up to 2 lbs. \$3.20 over 2 lbs. up to 4 lbs. \$5.20.

**Over 2 oz. 21 each additional half ounce.

***Over 2 oz. 26 each additional half ounce.

INTERNATIONAL REPLY COUPONS (IRCs) of United States issue may be purchased at U.S. postoffices for 42 each. Each coupon is exchangeable at a post office in any country for a stamp or stamps representing the international postage on a single rate surface letter. Below are listed the number of IRCs required to prepay an air mail letter of the first weight unit from the Countries indicated to the United States.

Afghanistan.....	5	El Salvador.....	2	Lesotho.....	5	St. Helena Is. (Great Britain)...	3
Aland Is. (Finland).....	2	Ethiopia.....	3	Liberia.....	5	St. Pierre and Miquelon Is. (France)	2
Albania.....	4			Libya.....	2	Samoa, Western (Great Britain)...	4
Algeria.....	2	Faeroe Is. (Denmark).....	2	Liechtenstein.....	2	Saudi Arabia.....	3
Andorra.....	2	Falkland Is. (Great Britain)....	3	Luxembourg.....	2	Senegal.....	2
Angola (Portugal).....	3	Fiji Is. (Great Britain).....	4			Seychelles Is. (Great Britain)...	3
Argentina.....	3	Finland.....	2	Macao (Portugal).....	3	Sierra Leone.....	3
Ascension Is. (Great Britain)...	3	France.....	2	Madeira Is. (Portugal).....	2	Solomon Is. (Great Britain)....	5
Australia.....	4	French Polynesia Is.....	2	Malagasy Republic (Madagascar)	3	Somalia.....	
Austria.....	2	French Somaliland (Afars and Issas)	2	Malawi.....	6	South Africa.....	5
Azores Is. (Portugal).....	2			Malaysia.....	5	South-West Africa (Namibia)...	5
		Gabon Republic.....	2	Maldives Is.....	5	South Yemen.....	5
Bahama Is. (Great Britain)....	2	Gambia.....	4	Mali Republic.....	2	Spain.....	2
Balearic Is. (Spain).....	2	Germany, Western Zone.....	2	Malta (Great Britain).....	2	Spanish West Africa.....	2
Bangladesh.....	2	Germany, Eastern Zone.....	2	Martinique (France).....	2	Sri Lanka (Ceylon).....	5
Barbados Is. (West Indies)....	3	Ghana.....	3	Mauritania.....	2	Sudan.....	3
Belgium.....	2	Gibraltar (Great Britain).....	2	Mauritius (Great Britain).....	3	Surinam.....	1
Belize.....	2	Gilbert and Ellice Is.....	5	Mexico.....	2	Swaziland.....	5
Bermuda Is.....	2	Great Britain.....	2	Morocco.....	2	Sweden.....	2
Bhutan.....		Greece (incl. Crete).....	2	Mozambique (Portugal).....	3	Switzerland.....	2
Bolivia.....	2	Greenland (Denmark).....	2			Syria.....	3
Botswana.....	5	Grenada & Grenadines.....	4	Nauru Is.....	4		
Brazil.....	2	Guadaloupe Is.....	2	Nepal.....	5	Tanzania.....	4
Brunei.....	8	Guatemala.....	2	Netherlands.....	2	Tasmania (Australia).....	4
Bulgaria.....	3	Guiana, French.....	2	Netherlands Antilles.....	2	Thailand.....	3
Burma.....	4	Guinea, Portuguese.....	2	New Caledonia (France).....	2	Timor (Portugal).....	4
Burundi.....	3	Guinea, Republic of.....	2	New Hebrides Is.....	2	Togo.....	2
		Guyana.....	4	New Zealand.....	3	Tonga Is. (Great Britain).....	3
Cambodia/Khmer Republic.....	3			Nicaragua.....	4	Trinidad and Tobago Is. (Britain)	2
Cameroon.....	2	Haiti.....	5	Niger.....	2	Tristan de Cunha & Gough Is...	3
Canada.....	2	Honduras, Republic of.....	3	Nigeria.....	3	Tunisia.....	2
Canary Is. (Spain).....	2	Hong Kong.....	5	Northern Ireland.....	2	Turkey.....	3
Cape Verde Is. (Portugal).....	3	Hungary.....	2	Norway.....	2	Turks & Caicos Is. (Great Britain)	2
Cayman Is. (West Indies).....	3						
Central African Republic.....	2	Iceland.....	2	Oman, Sultanate of.....	4	Uganda.....	4
Chad.....	2	India.....	3	Pakistan.....	2	United Arab Emirates.....	4
Chile.....		Indonesia.....	3	Panama.....	2	U. S. S. R.....	
China (Taiwan).....	3	Iran.....	4	Papua New Guinea.....	3	Upper Volta.....	2
China (Mainland).....	3	Iraq.....	3	Paraguay.....	3	Uruguay.....	2
Colombia.....	3	Ireland (Eire).....	3	Persian Gulf Ports.....	4		
Comoro Is. (France).....	3	Israel.....	3	Peru.....	3	Vatican City.....	2
Congo (Brazzaville).....	2	Italy.....	2	Philippines.....	3	Venezuela.....	2
Cook Is. (New Zealand).....	3	Ivory Coast.....	2	Pitcairn Is. (Great Britain)....		Vietnam.....	2
Corsica (France).....	2			Poland.....	2	Virgin Is. (Great Britain).....	2
Costa Rica.....	2	Jamaica.....		Portugal.....	2		
Cuba.....	4	Japan.....	2			West Irian (Indonesia).....	3
Cyprus.....	4	Jordan.....	3	Qatar.....	4	Windward Is. (West Indies)....	2
Czechoslovakia.....	2						
		Kenya.....	4	Reunion Is. (France).....	2	Yemen.....	
Dahomey.....	2	Korea.....	3	Rhodesia.....	5	Yugoslavia.....	3
Denmark.....	2	Kuwait.....	4	Romania.....	3		
Dominican Republic.....	2			Rwanda.....	2	Zaire, Rep. of.....	2
		Laos.....				Zambia.....	
Ecuador.....	3	Lebanon.....	3			Zanzibar.....	4
Egypt (United Arab Republic)...	2	Leeward Is. (West Indies).....	3				



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WRITE FOR LITERATURE

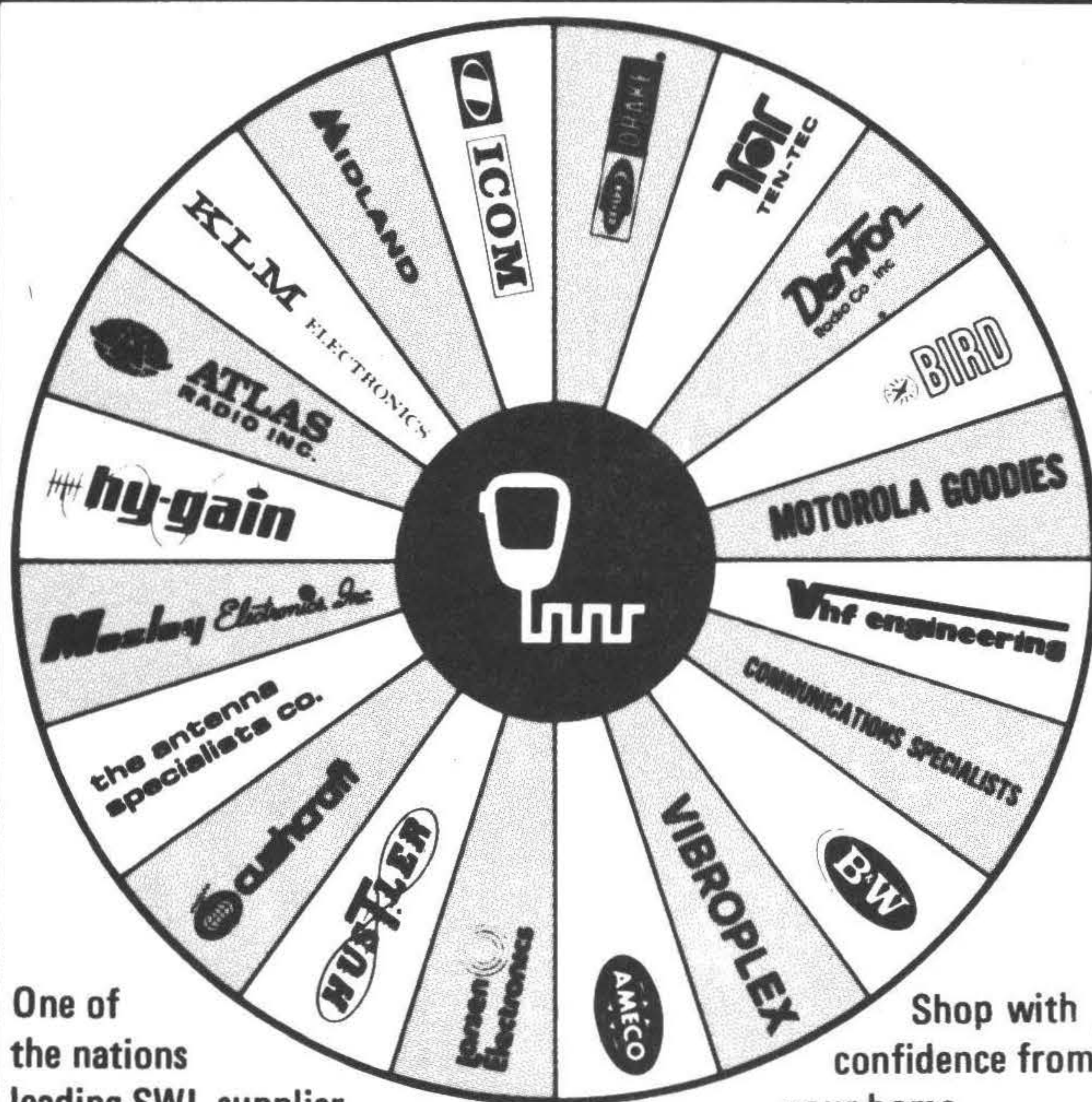
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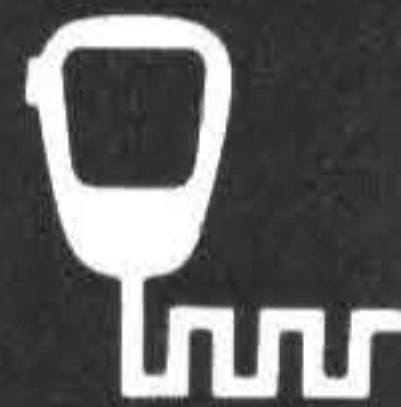
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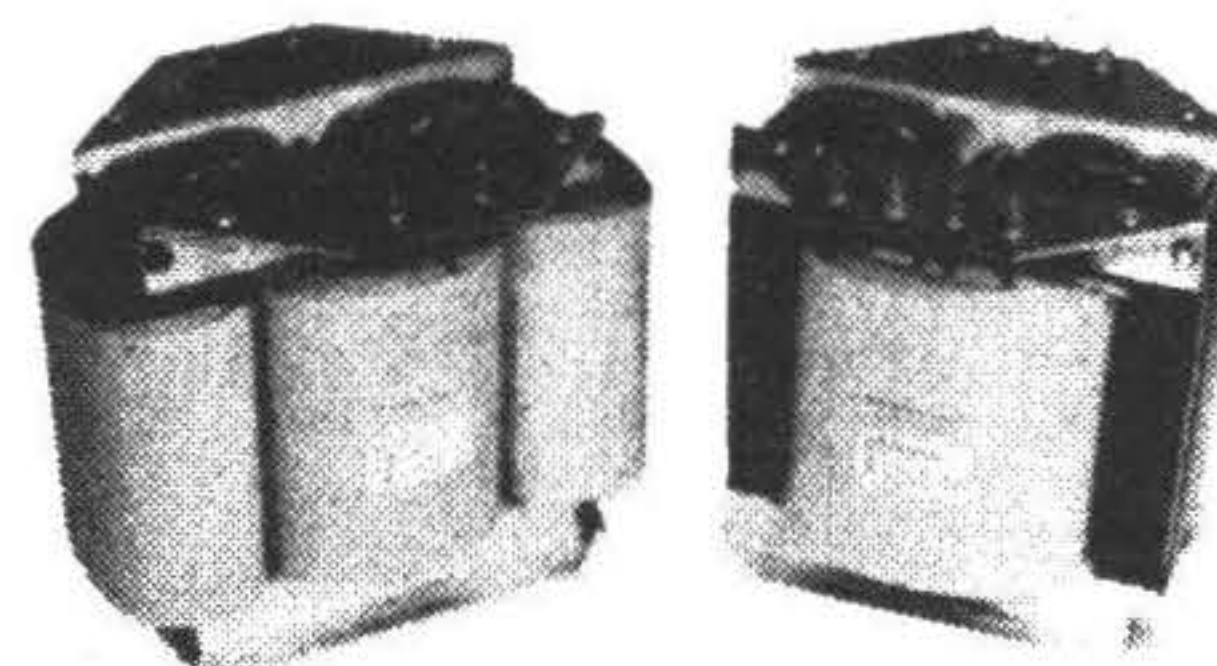
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1. KILL ALL POWER CIRCUITS COMPLETELY BEFORE TOUCHING ANYTHING BEHIND THE PANEL OR INSIDE THE CHASSIS OR THE ENCLOSURE.

2. Never allow anyone else to switch the power on and off for you while you're working on equipment.

3. Don't shoot trouble in a transmitter when you're tired or sleepy.

4. Never adjust variable links by hand. Use special care when checking energized tank circuits with absorption-type wavemeters.

5. Avoid bodily contact with grounded metal (racks, radiators) or damp floors when working on the transmitter.

6. Never wear phones while working on gear.

7. Follow the rule of keeping one hand in your pocket.

8. Instruct members of your household HOW to turn the power off, and HOW to apply artificial respiration. Instruction sheets on the latest approved method of resuscitation can be obtained from your local Red Cross office.

9. Develop your own safety technique. TAKE TIME TO BE CAREFUL. DEATH IS PERMANENT.

RULES FOR EQUIPMENT DESIGN AND CONSTRUCTION

ONE DISCONNECT SWITCH

A single plainly-labeled main switch should be provided to cut off all power from the equipment.

POWER SUPPLIES

All power supplies should be so enclosed or constructed that accidental bodily contact with power circuits is impossible.

All negative plate-supply and positive bias-supply terminals should be connected to the chassis and the chassis connected to a water pipe or other good ground connection.

Every power supply should use a conservatively-rated bleeder resistor. If it is placed on top of the chassis for ventilation, cover it with screening or perforated metal. When using shield wire for external power cabling, make sure the shielding is grounded to protect you in case of insulation breakdown.

PANEL CONTROLS AND METERING

Every control shaft extending through the front of the panel should be at ground potential. The frames of key or metering jacks should be fastened to the grounded panel. Meters, unless connected in the cathode or centertap, should be recessed to avoid danger of contact with the adjusting screw.

AUDIO EQUIPMENT

In addition to the construction rules set forth for power supplies, the following rule should be followed for speech equipment. The microphone stand and the enclosure should always be connected to the microphone-cable shield which, in turn, should be grounded to the chassis.

LIGHTNING PROTECTION

Merely "grounding everything" is not adequate protection from direct lightning strikes or static build-up. Lightning has devious methods of going where it isn't supposed to. There is only one way to protect your radio from lightning, and that is to disconnect everything completely and then ground all the disconnected lines. This applies to incoming power circuits, also; "pulling the big switch" is an old adage which makes sense. Finally, pay special attention to rotor control boxes; a lightning strike can come into the box via the control cable, go through the control box, out the power cord, and through your "cube-tap" (or whatever) and thence up the power cord of your radio, even though all power cords have been disconnected from the wall socket! Please, HANDLE EVERY CIRCUIT WITH CARE. The lowly 110-115 volts has caused more electrocutions than any other.

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- Boosts signal up to 26 db.
- For AM or SSB.
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- Advanced, solid-state circuitry.
- Simple to install.
- Improves immunity to transceiver front-end overload by use of its variable gain control.
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V70	144-148MHz	10-15W	75-90W	216x330x178mm	11.7 kg (26 lbs)	NO	\$315.00
V71	144-148MHz	1-3W	75-90W	216x330x178mm	11.7 kg (26 lbs)	NO	\$349.00
V180	144-148MHz	8-15W	170-200W	216x330x178mm	13.5 kg (30 lbs)	CW & FM	\$639.00
V350	144-148MHz	10-20W	350-400W	432x330x178mm	20.2 kg (45 lbs)	YES	\$875.00
V130B	220-225MHz	10-15W	70-85W	216x330x178mm	11.7 kg (26 lbs)	NO	\$329.00
V135B	220-225MHz	25-35W	140-160W	216x330x178mm	11.7 kg (26 lbs)	CW & FM	\$469.00
F110	FAN KIT, 115VAC			135x135x50mm	1 kg (2.2 lbs)	—	\$ 33.00
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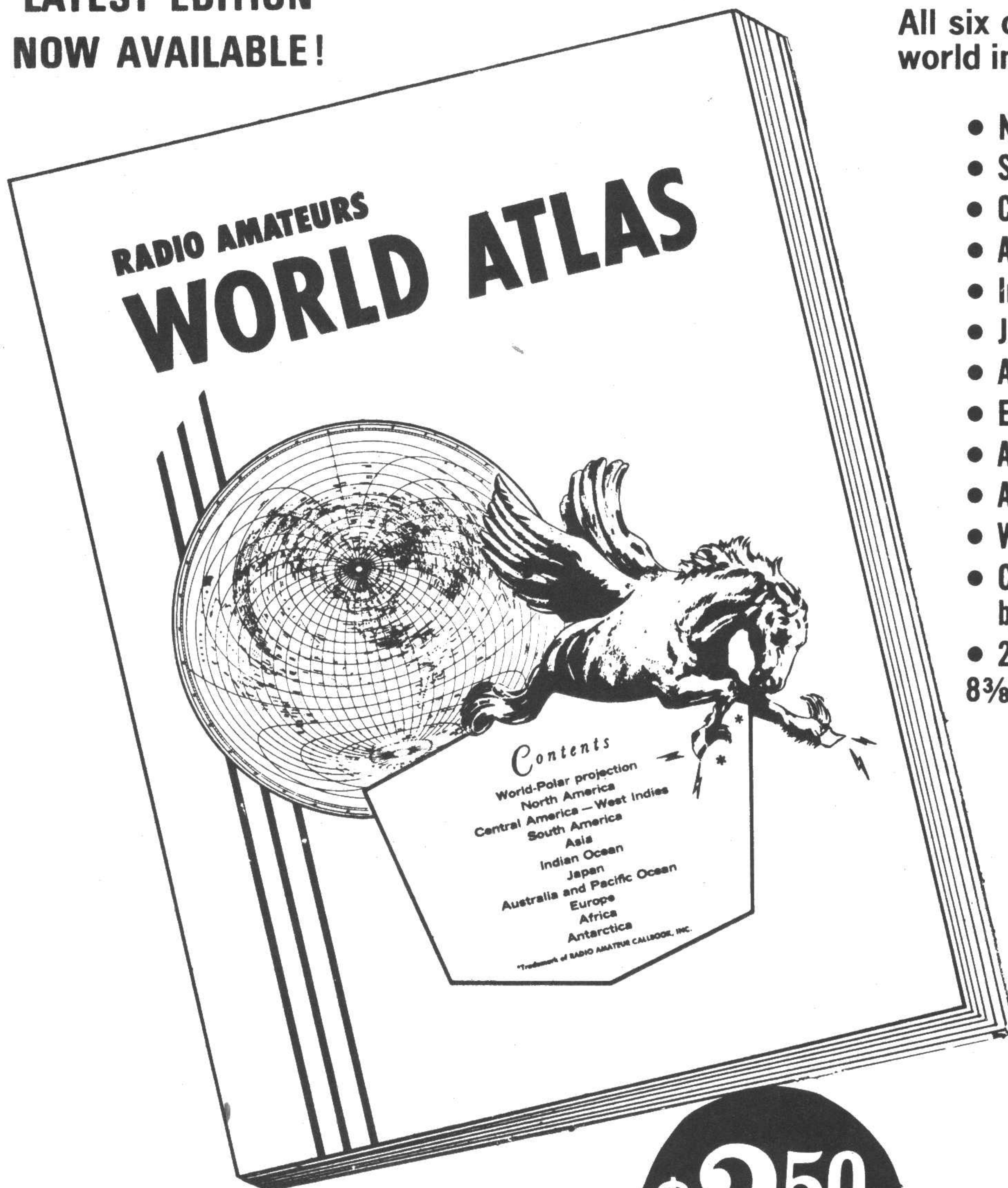
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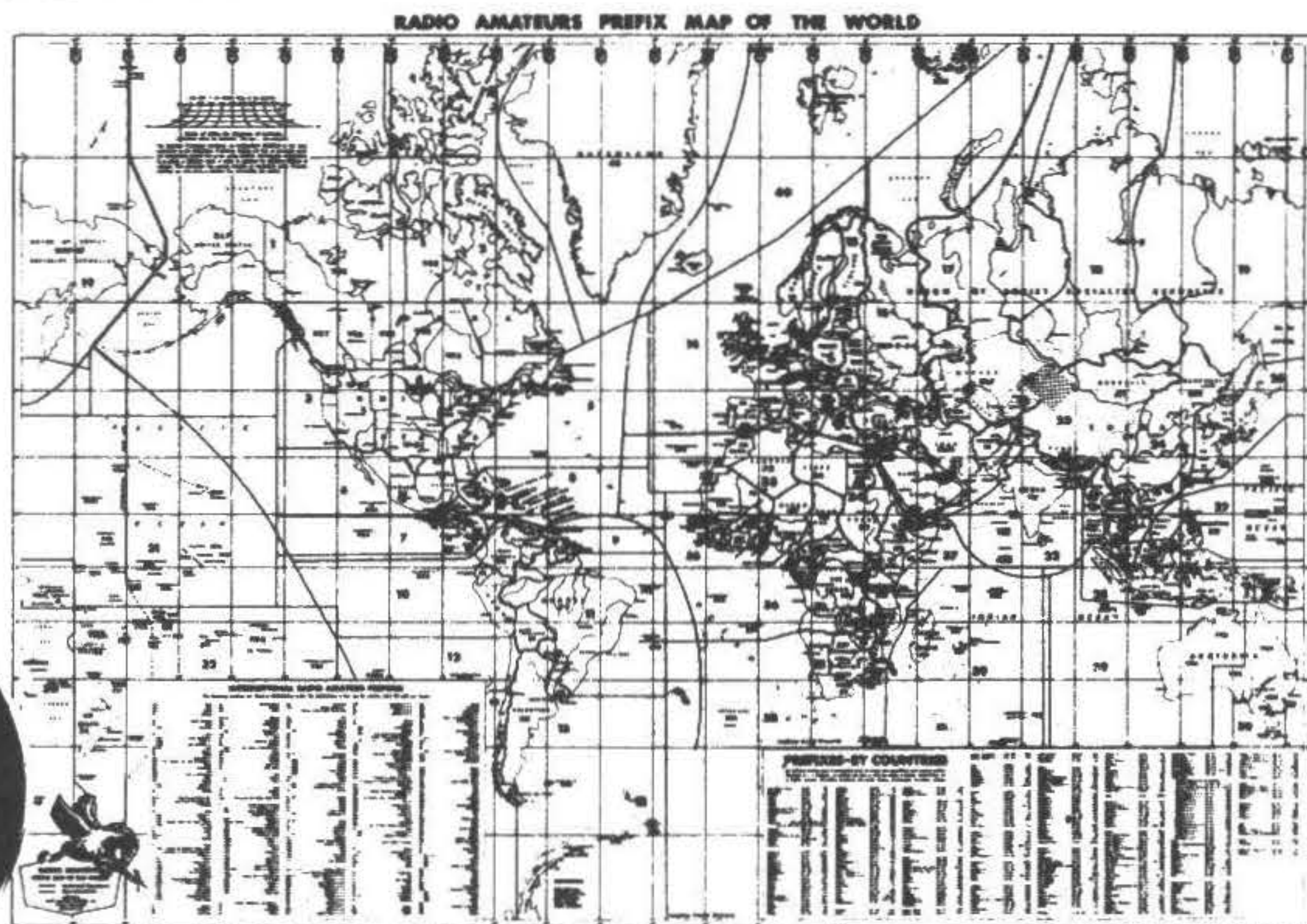
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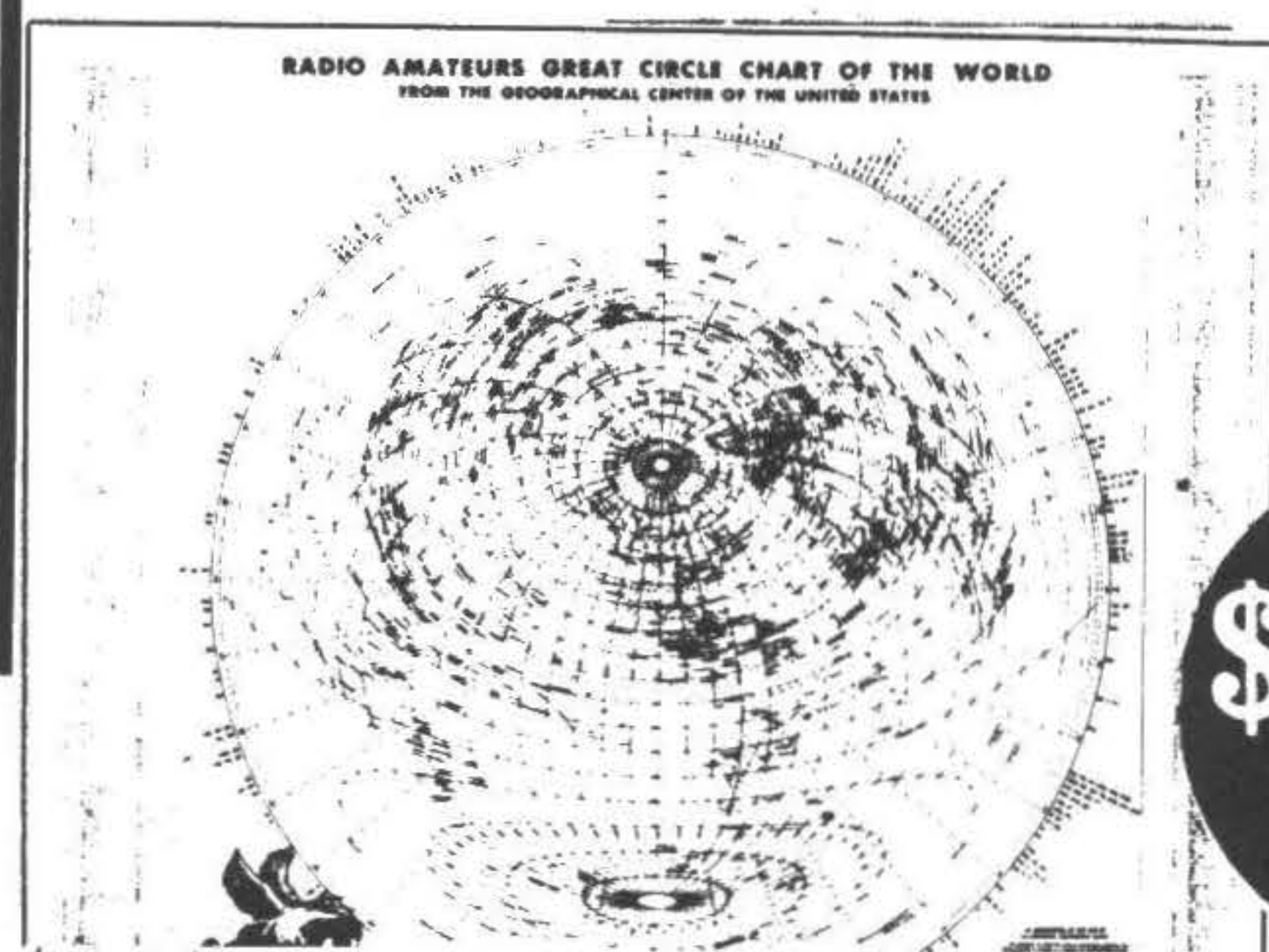
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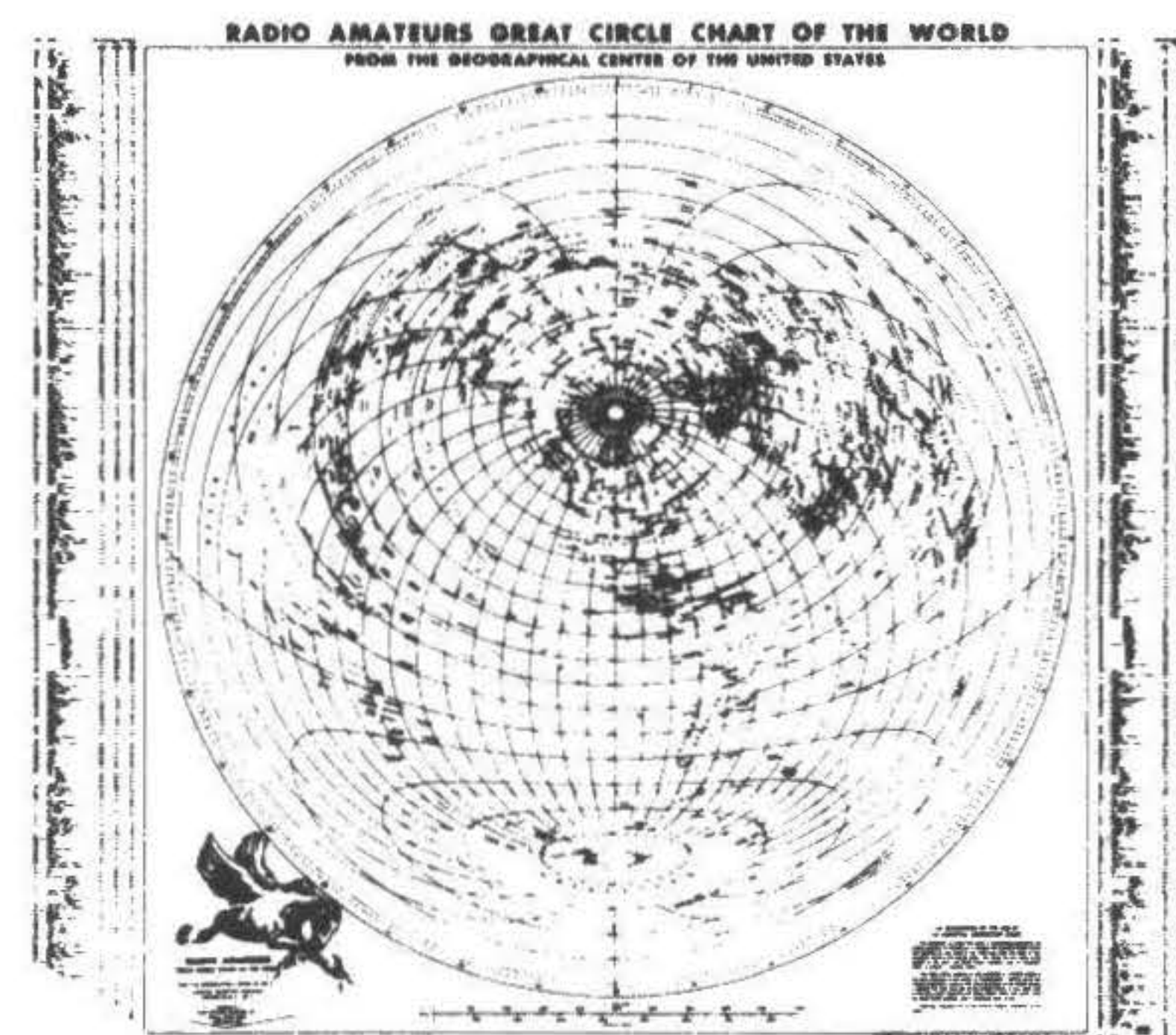
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Algeria	AF-31	Y6	Burkina Faso	BF-501	Y65	Egypt	EG-34
Angola	AG-31	Y66	Cameroon	CM-31	Y6	Equatorial Guinea	EG-35
Argentina	AR-31	Y67	Central African Rep.	AF-321	YU	Ethiopia	ET-31
Australia	AU-31	Y68	Chad	CH-31	Y6	Ghana	GH-31
Austria	AT-31	Y69	Cuba	CU-31	Y6	Guinea	GN-31
Bahamas	BS-31	Y70	Cyprus	CY-31	Y6	Guinea-Bissau	GN-32
Bahrain	BH-31	Y71	Czech Rep.	AF-331	Y64	Honduras	HN-31
Barbados	BB-31	Y72	Denmark	DK-31	Y65	Hong Kong	HK-31
Belize	BZ-31	Y73	Egypt	EG-31	Y66	Hungary	HU-31
Bermuda	BM-31	Y74	El Salvador	SA-31	Y67	Iceland	IS-31
Bhutan	BH-32	Y75	Equatorial Guinea	EG-321	Y68	India	IN-31
Bolivia	BO-31	Y76	Estonia	EE-31	Y69	Indonesia	ID-31
Bosnia & Herzegovina	BA-31	Y77	Finland	FI-31	Y70	Iran	IR-31
Brazil	BR-31	Y78	France	FR-31	Y71	Israel	IL-31
British Virgin Is.	VI-31	Y79	Germany	DE-31	Y72	Italy	IT-31
Bulgaria	BG-31	Y80	Ghana	GH-31	Y73	Jamaica	JM-31
Burkina Faso	BF-31	Y81	Gibraltar	GI-31	Y74	Japan	JP-31
Burundi	BU-31	Y82	Greece	GR-31	Y75	Jordan	JO-31
Cambodia	KB-31	Y83	Greenland	GL-31	Y76	Kazakhstan	KZ-31
Cameroon	CM-31	Y84	Guatemala	GU-31	Y77	Kenya	KE-31
Canada	CA-31	Y85	Haiti	HT-31	Y78	Korea	KR-31
Cape Verde	CV-31	Y86	Hong Kong	HK-31	Y79	Kuwait	KW-31
Cayman Is.	KY-31	Y87	Hungary	HU-31	Y80	Laos	LA-31
Czech Rep.	AF-331	Y88	Iceland	IS-31	Y81	Lebanon	LB-31
Dominican Rep.	AF-341	Y89	India	IN-31	Y82	Libya	LY-31
Dominican Rep.	AF-341	Y90	Indonesia	ID-31	Y83	Mali	ML-31
Dominican Rep.	AF-341	Y91	Iran	IR-31	Y84	Mexico	MX-31
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Dominican Rep.	AF-341	Y96	Jordan	JO-31	Y89	Nicaragua	NI-31
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Dominican Rep.	AF-341	Y98	Kenya	KE-31	Y91	Nigeria	NG-31
Dominican Rep.	AF-341	Y99	Korea	KR-31	Y92	North Macedonia	MK-31
Dominican Rep.	AF-341	Y00	Kuwait	KW-31	Y93	Poland	PL-31
Dominican Rep.	AF-341	Y01	Laos	LA-31	Y94	Romania	RO-31
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Dominican Rep.	AF-341	Y04	Mali	ML-31	Y97	Senegal	SN-31
Dominican Rep.	AF-341	Y05	Mexico	MX-31	Y98	Seychelles	SC-31
Dominican Rep.	AF-341	Y06	Moldova	MD-31	Y99	Singapore	SG-31
Dominican Rep.	AF-341	Y07	Monaco	MC-31	Y00	Slovakia	SK-31
Dominican Rep.	AF-341	Y08	Morocco	MA-31	Y01	Slovenia	SI-31
Dominican Rep.	AF-341	Y09	Mozambique	MZ-31	Y02	Sri Lanka	LK-31
Dominican Rep.	AF-341	Y10	Nicaragua	NI-31	Y03	Taiwan	TA-31
Dominican Rep.	AF-341	Y11	Niger	NR-31	Y04	Tanzania	TZ-31
Dominican Rep.	AF-341	Y12	Nigeria	NG-31	Y05	Thailand	TH-31
Dominican Rep.	AF-341	Y13	North Macedonia	MK-31	Y06	Togo	TG-31
Dominican Rep.	AF-341	Y14	Poland	PL-31	Y07	Tonga	TO-31
Dominican Rep.	AF-341	Y15	Romania	RO-31	Y08	Trinidad & Tobago	TT-31
Dominican Rep.	AF-341	Y16	Russia	RU-31	Y09	Uganda	UG-31
Dominican Rep.	AF-341	Y17	Saudi Arabia	SA-32	Y10	Ukraine	UA-31
Dominican Rep.	AF-341	Y18	Senegal	SN-31	Y11	United Arab Emirates	AE-31
Dominican Rep.	AF-341	Y19	Seychelles	SC-31	Y12	United Kingdom	GB-31
Dominican Rep.	AF-341	Y20	Singapore	SG-31	Y13	United States	US-31
Dominican Rep.	AF-341	Y21	Slovakia	SK-31	Y14	Yemen	YE-31
Dominican Rep.	AF-341	Y22	Slovenia	SI-31	Y15	Zambia	ZM-31
Dominican Rep.	AF-341	Y23	Sri Lanka	LK-31	Y16	Zimbabwe	ZW-31

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INTERNATIONAL "Q" SIGNALS

Abbreviation	Question	Answer or Advice	Abbreviation	Question	Answer or Advice
QRA	What is the name of your station?	The name of my stations is . . .	QSR	Will you listen to . . . [call sign(s)] on . . . kc/s (or Mc/s)	I am listening to . . . [call sign(s)] on . . . kc/s (or Mc/s).
QRB	How far approximately are you from my station?	The approximate distance between our stations is . . . nautical miles (or kilometres)	QSY	Shall I change to transmission on another frequency?	Change to transmission on another frequency [or on . . . kc/s (or Mc/s)].
QRD	Where are you bound and where are you from?	I am bound for . . . from . . .	QSZ	Shall I send each word or group more than once?	Send each word or group twice (or . . . times).
QRG	Will you tell me my exact frequency or that of . . . ?	Your exact frequency (or that of . . . is . . . kc/s (or Mc/s).	QTA	Shall I cancel telegram number . . . as if it had not been sent?	Cancel telegram number . . . as if it had not been sent.
QRH	Does my frequency vary?	Your frequency varies.	QTB	Do you agree with my counting of words?	I do not agree with your counting of words; I will repeat the first letter or digit of each word or group.
QRI	How is the tone of my transmission?	The tone of your transmission is . . . (1. Good; 2. Variable; 3. Bad).	QTC	How many telegrams have you to send?	I have . . . telegrams for you (or for . . .).
QRK	What is the readability of my signals (or those of . . .)?	The readability of your signals (or those of . . .) is . . . (1. Unreadable; 2. Readable now and then; 3. Readable, but with difficulty; 4. Readable; 5. Perfectly readable).	QTE	What is my TRUE bearing from you? What is my TRUE bearing from . . . (call sign)? What is the TRUE bearing of . . . (call sign) from . . . (call sign)?	Your TRUE bearing from me is . . . degrees (at . . . hours) or Your TRUE bearing from . . . (call sign) was . . . degrees (at . . . hours) or The TRUE bearing of . . . (call sign) from . . . (call sign) was . . . degrees at . . . hours.
QRL	Are you busy?	I am busy (or I am busy with . . .). Please do not interfere.	QTH	Will you send two dashes of ten seconds each followed by your call sign (repeated . . . times) [on . . . kc/s (or Mc/s)]?	I am going to send two dashes of ten seconds each followed by my call sign (repeated . . . times) [on . . . kc/s (or Mc/s)]
QRM	Are you being interfered with?	I am being interfered with.	QTI	Will you request . . . to send two dashes of ten seconds followed by his call sign (repeated . . . times) on . . . kc/s (or Mc/s)?	I have requested . . . to send two dashes of ten seconds followed by his call sign (repeated . . . times) on . . . kc/s (or Mc/s).
QRN	Are you troubled by static?	I am troubled by static.	QTN	What is your position in latitude and longitude (or according to any other indication)?	My position is . . . latitude . . . longitude (or according to any other indication).
QRO	Shall I increase power?	Increase power.	QTO	What is your TRUE track?	My TRUE track is . . . degrees.
QRP	Shall I decrease power?	Decrease power.	QTP	What is your speed?	My speed is . . . knots (or kilometres per hour).
QRQ	Shall I send faster?	Send faster (. . . words per minute).	QTL	What is your TRUE heading?	My TRUE heading is . . . degrees.
QRR	Are you ready for automatic operation?	I am ready for automatic operation. Send at . . . words per minute.	QTM	At what time did you depart from . . . (place)?	I departed from . . . (place) at . . . hours.
QRS	Shall I send more slowly?	Send more slowly (. . . words per minute).	QTO	Have you left dock (or port)?	I have left dock (or port)
QRT	Shall I stop sending?	Stop sending.	QTP	Are you airborne?	I am airborne.
QRU	Have you anything for me?	I have nothing for you.	QTP	Are you going to enter dock (or port)?	I am going to enter dock (or port)
QRV	Are you ready?	I am ready.	QTP	Are you going to alight (or land)?	I am going to alight (or land).
QRW	Shall I inform . . . that you are calling him on . . . kc/s (or Mc/s).	Please inform . . . that I am calling him on . . . kc/s (or Mc/s).	QTP	Can you communicate with my station by means of the International Code of Signals?	I am going to communicate with your station by means of the International Code of Signals.
QRX	When will you call me again?	I will call you again at . . . hours [on . . . kc/s (or Mc/s)].	QTR	What is the correct time?	The correct time is . . . hours.
QRY	What is my turn?	Your turn is Number . . . (Relates to communication.)	QTS	Will you send your call sign for . . . minute(s) now (or at . . . hours) [on . . . kc/s (or Mc/s)] so that your frequency may be measured?	I will send my call sign for . . . minute(s) now (or at . . . hours) [on . . . kc/s (or Mc/s)] so that my frequency may be measured.
QRZ	Who is calling me?	You are being called by . . . [on . . . kc/s (or Mc/s)].	QTV	What are the hours during which your station is open?	My station is open from . . . to . . . hours.
QSA	What is the strength of my signals (or those of . . .)?	The strength of your signals (or those of . . .) is . . . (1. Scarcely perceptible; 2. Weak; 3. Fairly good; 4. Good; 5. Very good).	QTV	Shall I stand guard for you on the frequency of . . . kc/s (or Mc/s) (from . . . to . . . hours)?	Stand guard for me on the frequency of . . . kc/s (or Mc/s) (from . . . to . . . hours).
QSB	Are my signals fading?	Your signals are fading.	QTX	Will you keep your station open for further communication with me until further notice (or until . . . hours)?	I will keep my station open for further communication with you until further notice (or until . . . hours).
QSD	Is my keying defective?	Your keying is defective.	QUA	Have you news of . . . (call sign)?	Here is news of . . . (call sign).
QSG	Shall I send . . . telegrams at a time?	Send . . . telegrams at a time.	QUB	Can you give me, in the following order, information concerning: visibility, height of clouds, direction and velocity of ground wind at . . . (place of observation)?	Here is the information requested . . .
QSH	What is the charge to be collected per word to . . . including your internal telegraph charge?	The charge to be collected per word to . . . including my internal telegraph charge is . . . francs.	QUC	What is the number (or other indication) of the last message you received from me [or from (call sign)]?	The number (or other indication) of the last message I received from you [or from . . . (call sign)] is . . .
QSK	Can you hear me between your signals?	I can hear you between my signals.	QUD	Have you received the urgency signal sent by . . . (call sign of mobile station)?	I have received the urgency signal sent by . . . (call sign of mobile station) at . . . hours.
QSL	Can you acknowledge receipt?	I am acknowledging receipt.	QUF	Have you received the distress signal sent by . . . (call sign of mobile station)?	I have received the distress signal sent by . . . (call sign of mobile station) at . . . hours.
QSM	Shall I repeat the last telegram which I sent you, or some previous telegram?	Repeat the last telegram which you sent me [or telegram(s) number(s) . . .].	QUG	Will you be forced to alight (or land)?	I am forced to alight (or land immediately).
QSN	Did you hear me [or . . . (call sign)] on . . . kc/s (or Mc/s)?	I did hear you [or . . . (call sign) on . . . kc/s (or Mc/s).	QUH	Will you give me the present barometric pressure at sea level?	I shall be forced to alight (or land) at . . . (position or place).
QSO	Can you communicate with . . . direct or by relay?	I can communicate with . . . direct (or by relay through . . .).			The present barometric pressure at sea level is . . . (units).
QSP	Will you relay to . . . free of charge?	I will relay to . . . free of charge.			
QSQ	Have you a doctor on board [or is . . . (name of person) on board]?	I have a doctor on board [or . . . name of person) is on board].			
QSU	Shall I send or reply on this frequency [or on . . . kc/s (or Mc/s)] (with emissions of class . . .)?	Send or reply on this frequency [or on . . . kc/s (or Mc/s)] (with emissions of class . . .).			
QSV	Shall I send a series of V's on this frequency [or . . . kc/s (or Mc/s)]?	Send a series of V's on this frequency [or . . . kc/s (or Mc/s)].			
QSW	Will you send on this frequency [or on . . . kc/s (or Mc/s)] (with emissions of class . . .)?	I am going to send on this frequency [or on . . . kc/s (or Mc/s)] (with emissions of class . . .).			

WORLD TIME CONVERSION CHART IN HOURS

Greenwich Meridian Time. London, Eng- land.	Central Europe, Ber- lin, Geneva, Stock- holm, Vienna.	Eastern Europe, Ath- ens, Cape Town, Cairo, Moscow	Arabia, Armenia, Ethiopia, Madagas- car.	Mauritius, Iran, Reunion Island.	Central Russia, Bom- bay, India.	Calcutta, Novosi- birsk Russia, Tibet.	Sumatra, Thailand, Laos.	Philippines, Perth, Australia	Central Australia, Tokyo, Japan.	Eastern Australia, Melbourne, Sydney.	New Caledonia.	International Date Line, New Zealand, Fiji Islands.	Nome, Alaska, Samoa Islands.	Hawaii, Midway Islands.	Eastern Alaska, Dawson	Pacific Standard Time, Los Angeles, Seattle, Juneau.	Mountain Standard Time, Calgary, Denver, Phoenix.	Central Standard Time, Chicago, Costa Rica.	Eastern Standard Time, Montreal, New York, Peru.	Atlantic Standard Time, Argentina, Nova Scotia.	Greenland, Rio de Janeiro, Brazil.	Azores.	Iceland, Canary Islands.
0000	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	Noon	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM
0100	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	Noon	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	Mid Night
0200	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	Noon	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	Mid Night	1AM
0300	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	Noon	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	Mid Night	1AM	2AM
0400	5AM	6AM	7AM	8AM	9AM	10AM	11AM	Noon	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	Mid Night	1AM	2AM	3AM
0500	6AM	7AM	8AM	9AM	10AM	11AM	Noon	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	Mid Night	1AM	2AM	3AM	4AM
0600	7AM	8AM	9AM	10AM	11AM	Noon	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	Mid Night	1AM	2AM	3AM	4AM	5AM
0700	8AM	9AM	10AM	11AM	Noon	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	Mid Night	1AM	2AM	3AM	4AM	5AM	6AM
0800	9AM	10AM	11AM	Noon	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	Mid Night	1AM	2AM	3AM	4AM	5AM	6AM	7AM
0900	10AM	11AM	Noon	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	Mid Night	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM
1000	11AM	Noon	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	Mid Night	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM
1100	Noon	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	Mid Night	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM
1200	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	Mid Night	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM
1300	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	Mid Night	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	Noon
1400	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	Mid Night	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	Noon	1PM
1500	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	Mid Night	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	Noon	1PM	2PM
1600	5PM	6PM	7PM	8PM	9PM	10PM	11PM	Mid Night	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	Noon	1PM	2PM	3PM
1700	6PM	7PM	8PM	9PM	10PM	11PM	Mid Night	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	Noon	1PM	2PM	3PM	4PM
1800	7PM	8PM	9PM	10PM	11PM	Mid Night	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	Noon	1PM	2PM	3PM	4PM	5PM
1900	8PM	9PM	10PM	11PM	Mid Night	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	Noon	1PM	2PM	3PM	4PM	5PM	6PM
2000	9PM	10PM	11PM	Mid Night	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	Noon	1PM	2PM	3PM	4PM	5PM	6PM	7PM
2100	10PM	11PM	Mid Night	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	Noon	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM
2200	11PM	Mid Night	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	Noon	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM
2300	Mid Night	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	Noon	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM

With this chart you can convert standard time in any time zone to GMT or tell what time it is in other parts of the world. To correctly use this chart visualize each horizontal line as a complete circle. From your time zone tracing horizontally to the right (Counter Clockwise) it will be tomorrow when you pass midnight and yesterday when you pass the international date line. To the left (Clockwise) it will be yesterday when you pass midnight and tomorrow when you pass the international date line. There is no change in date when you pass both midnight and the international date line going in one direction. For instance at 8 PM in New York Eastern Standard Time it is 2 AM tomorrow in Berlin, Germany and 11 AM tomorrow in Sydney, Australia. Always trace in the shortest direction from your time zone to find what time it is in any other zone.

CENSUS OF AMATEUR RADIO LICENSES OF THE WORLD*

PREFIX	COUNTRY	NUMBER OF RADIO AMATEUR LICENSES LISTED	PREFIX	COUNTRY	NUMBER OF RADIO AMATEUR LICENSES LISTED	PREFIX	COUNTRY	NUMBER OF RADIO AMATEUR LICENSES LISTED
AC3	SIKKIM.....	1	JA-JR	JAPAN.....	21,179	I	CNTRL & SOUTHERN LINE IS..	2
AP	PAKISTAN.....	57	JD1	OGASAWARA.....	252	VR7	TUVALU IS.....	7
A2	BOTSWANA.....	50	JT1	MONGOLIA.....	23	VR3	BRUNEI.....	14
A4X	SULTANATE OF OMAN.....	32	JW	SVALBARD IS.....	6	VS5	HONG KONG.....	33
A6X	UNITED ARAB EMIRATES.....	3	JX	JAN MAYEN IS.....	11	VS6	INDIA.....	978
A7X	QATAR.....	5	JY	JORDAN.....	92	VU	U.S.A. (SEE K,W).....	
A9X	BAHRAIN.....	28	J28	REPUBLIC OF DJIBOUTI.....	25	W,K		
A35	TONGA.....	8	J3A	GRENADA.....	33	XE,XF	MEXICO.....	1,681
A51	BHUTAN.....	4	K,W	U.S.A. (48 STATES).....	368,719	XT2	VOLTAIC REPUBLIC.....	9
BV2	TAIWAN (FORMOSA).....	2	KA	U.S. PERSONNEL IN JAPAN.....	140	XZ	BURMA.....	16
CE	CHILE.....	2,345	KB6	BAKER, CANTON, ENDERBURY, HOWLAND & PHOENIX IS.....	3	YB-JD	INDONESIA.....	2,470
CM,CO	CUBA.....	362	KC4	NAVASSA IS.....	2	YJ	NEW HEBRIDES.....	19
CN	MOROCCO.....	108	KC4AA,US	ANTARCTICA.....	14	YK	SYRIA.....	12
CP	BOLIVIA.....	1,189	KC6	CAROLINE IS.....	39	YN	NICARAGUA.....	503
CR9	MACAO.....	2	KG4	GUANTANAMO BAY, CUBA.....	35	YO	ROMANIA.....	1,635
CT1	PORTUGAL.....	949	KG6	MARIANA IS.....	248	YS	EL SALVADOR.....	290
CT2	AZORES IS.....	29	KH6	HAWAII.....	1,859	YU	YUGOSLAVIA.....	3,255
CT3	MADEIRA IS.....	37	KJ6	JOHNSTON IS.....	10	YV	VENEZUELA.....	11,747
CX	URUGUAY.....	2,755	KL7	ALASKA.....	1,623	ZB2	GIBRALTAR.....	18
C5A	THE GAMBIA.....	30	KM6	MIDWAY IS.....	7	ZD7	SAINT HELENA.....	5
C6A	BAHAMA IS.....	41	KP4	PUERTO RICO.....	1,578	ZD8	ASCENSION IS.....	20
C21	REPUBLIC OF NAURU.....	10	KP6	JARVIS & PALMYRA IS.....	5	ZD9	TRISTAN DA CUNHA, & GOUGH IS.....	3
C31	ANDORRA.....	118	KS6	AMERICAN SAMOA.....	42	ZE	RHODESIA.....	166
DA-DL	FED REP OF GERMANY.....	30,888	KV4	VIRGIN IS.....	133	ZF1	CAYMAN IS.....	62
DM	E GERMAN DEMOCRATIC REP.....	3,356	KW6	WAKE IS.....	9	ZK1	COOK IS.....	35
DU	PHILIPPINES.....	537	KX6	MARSHALL IS.....	56	ZK2	NIUE IS.....	3
D2A	ANGOLA.....	9	KZ5	CANAL ZONE.....	232	ZL	NEW ZEALAND.....	5,201
D4C	REP OF CAPE VERDI.....	3	LA-LJ	NORWAY.....	4,444	ZP	PARAGUAY.....	748
EA	SPAIN.....	4,065	LU	ARGENTINA.....	21,420	ZR,ZS	SOUTH AFRICA.....	3,191
EA6	BALEARIC IS.....	115	LX	LUXEMBOURG.....	180	ZR,ZS3	SOUTH-WEST AFRICA.....	68
EA8	CANARY IS.....	368	LZ	BULGARIA.....	723	3A	MONACO.....	30
EA9	SPANISH SAHARA, IFNI, CEUTA Y MELILLA.....	41	M1	SAN MARINO.....	6	3B6	AGALEGA.....	2
EI	IRELAND.....	585	OA	PERU.....	1,681	3B7	ST. BRANDON.....	1
EJØ	ARAN IS.....	1	OD5	LEBANON.....	146	3B8	MAURITIUS IS.....	33
EL,5L	LIBERIA.....	89	OE	AUSTRIA.....	2,779	3B9	RODRIGUES.....	1
EP,9D5	IRAN.....	82	OH	FINLAND.....	3,035	3D2	FIJI IS.....	37
F	FRANCE.....	10,198	OHØ	ALAND IS.....	26	3D6	SWAZILAND.....	30
FB8	AMSTERDAM, ST PAUL, CROZET, KERGUELEN, TROMELIN IS.....	35	ØJØ, ØHØM	MARKET REEF.....	2	3V8	TUNISIA.....	2
FC	CORSICA.....	53	OK,OL	CZECHOSLOVAKIA.....	3,341	4S7	SRI LANKA (CEYLON).....	72
FG7	GUADELOUPE.....	57	ON	BELGIUM.....	2,507	4U	UNITED NATIONS, GENEVA.....	2
FH3	MAYOTTE.....	4	OX	GREENLAND.....	88	4W1,3	YEMEN.....	1
FK8	NEW CALEDONIA.....	50	OY	FAEROES IS.....	84	4X4,4Z4	ISRAEL.....	819
FM7	MARTINIQUE.....	62	OZ	DENMARK.....	3,879	5B4,2C4	CYPRUS.....	147
F08	FRENCH POLYNESIA.....	77	PA,PE,PI	NETHERLANDS.....	5,426	5H1	ZANZIBAR.....	1
FP8	ST. PIERRE & MIQUELON IS.....	35	PJ	NETHERLANDS ANTILLES.....	158	5H3	TANZANIA.....	9
FR7	REUNION IS.....	50	PP,PY	BRAZIL.....	16,636	5N2	NIGERIA.....	9
FW8	WALLIS IS.....	2	PYØ	FERNANDO DE NORONHA IS.....	14	5R8	MADAGASCAR.....	5
FY7	FRENCH GUIANA.....	33	PYØ	TRINDADE & MARTIM VAZ.....	1	5T5	MAURITANIA.....	9
G	ENGLAND.....	21,204	PZ	SURINAM.....	51	5U7	NIGER.....	10
GD	ISLE OF MAN.....	59	P29	PAPUA NEW GUINEA.....	114	5V	TOGO.....	8
GI	NORTHERN IRELAND.....	479	SJ-SM	SWEDEN.....	7,116	5W1	WESTERN SAMOA.....	19
GJ	JERSEY.....	57	SP	POLAND.....	6,201	5X5	UGANDA.....	2
GM	SCOTLAND.....	1,355	ST	SUDAN.....	2	5Z4	KENYA.....	79
GU	BAILIWICK OF GUERNSEY.....	63	SU	EGYPT.....	8	6W8	SENEGAL.....	73
GW	WALES.....	1,011	SV	GREECE, CRETE.....	247	6Y5	JAMAICA.....	99
HA,HG	HUNGARY.....	709	S2	BANGLADESH.....	2	7J1	OKINO-TORI-SHIMA.....	1
HB	SWITZERLAND.....	2,146	S79	REPUBLIC OF SEYCHELLES.....	27	7P8	LESOTHO.....	12
HBØ	LIECHTENSTEIN.....	8	S8	TRANSKEI.....	10	7Q7	MALAWI.....	13
HC	ECUADOR.....	963	S9	DEM REP ST THOMAS-PRINCEPE	1	7X	ALGERIA.....	67
HC8	GALAPAGOS IS.....	10	TA,TC	TURKEY.....	14	8P6	BARBADOS IS.....	135
HH	HAITI.....	19	TF	ICELAND.....	98	8Q6,VS9	MALDIVE IS.....	1
HI	DOMINICAN REPUBLIC.....	1,555	TG	GUATEMALA.....	403	8R	GUYANA.....	33
HK	COLUMBIA.....	2,953	TI	COSTA RICA.....	778	9G1	GHANA.....	92
HKØ	BAJO NUEVO IS.....	2	TI9	COCOS IS.....	7	9H1,5	MALTA.....	96
HKØ	MALPELO IS.....	1	TJ	CAMEROON.....	25	9H4	GOZO (MALTA).....	13
HKØ	S ANDRES, PROVIDENCIA IS.....	26	TL8	CENTRAL AFRICAN REPUBLIC.....	2	9I,9J	ZAMBIA.....	35
HM,HL	KOREA.....	198	TN8	CONGO REPUBLIC.....	7	9K2	KUWAIT.....	125
HP	PANAMA.....	497	TR8	GABON.....	28	9L	SIERRA LEONE.....	13
HR	HONDURAS.....	227	TT8	CHAD.....	3	9M2	WEST MALAYSIA.....	109
HS	THAILAND.....	115	TU2	IVORY COAST.....	108	9M6	SABAH.....	10
HV	VATICAN CITY.....	2	TY	PEOPLE'S REP OF BENIN.....	2	9M8	SARAWAK.....	9
HZ,7Z	SAUDI ARABIA.....	9	U	SOVIET UNION.....	17,020	9N1	NEPAL.....	1
H44	SOLOMON IS.....	36	VE	CANADA.....	19,022	9Q5	REPUBLIC OF ZAIRE.....	19
H5	REP OF BOPHUTHATSWANA.....	7	VK	AUSTRALIA.....	8,772	9U5	BURUNDI.....	5
I	ITALY.....	11,436	VO1	NEWFOUNDLAND.....	365	9V1	REP OF SINGAPORE.....	46
IA5	TUSCAN ARCHIPELAGO.....	9	VO2	LABRADOR.....	41	9X	RWANDA.....	24
IC8	CAPRI & ISCHIA IS.....	34	VP1	BELIZE (BRITISH HONDURAS).....	59	9Y4	TRINIDAD & TOBAGO IS.....	98
IE9	USTICA IS.....	2	VP2	WINDWARD - LEEWARD IS.....	227			
IF9	LEVANZO IS.....	1	VP5	TURKS & CAICOS IS.....	166			
IG9	LAMPEDUSA IS.....	6	VP8	FALKLAND, SOUTH GEORGIA.....	98			
IH9	PANTELLERIA IS.....	7	VP9	BERMUDA.....	91			
IMØ	MADDALENA IS.....	2	VR1	BRITISH PHOENIX, GILBERT, OCEAN IS.....	11			
IS	SARDINIA.....	287	VR3	NORTHERN LINE IS.....	7			
IT	SICILY.....	644	VR6	PITCAIRN IS.....	1			

*FROM THE 1979 RADIO AMATEUR CALLBOOKS.
ABSENCE OF PREFIX AND COUNTRY INDICATES EITHER
THAT NO LICENSES HAVE BEEN ISSUED OR HAVE NOT
BEEN OBTAINABLE FROM OFFICIAL SOURCES.

WORLD WIDE QSL BUREAUS

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A4 ROYAL OHANI AMATEUR RADIO SOCIETY, BOX 981, MUSCAT, SULTANATE OF OMAN, ARABIA
 A9X AMATEUR RADIO ASSOCIATION BAHRAIN, BOX 472, AMALI, BAHRAIN, ARABIAN GULF
 AP PAKISTAN AMATEUR RADIO SOCIETY, QSL BUREAU, BOX 65, LAHORE, WEST PAKISTAN
 BV2 CHINA RADIO ASSOCIATION, BOX 101, TAIPEI, TAIWAN 100, REPUBLIC OF CHINA
 CE RADIO CLUB OF CHILE, BOX 13630, CORREO 15, SANTIAGO, CHILE
 OR FEDERACION DE CLUBES DE RADIOAFICIONADOS DE CHILE, BOX 72, VALPARAISO, CHILE
 CM-CO FEDERACION DE RADIOAFICIONADOS DE CUBA, BOX 1, HAVANA, CUBA
 CM8-COB QSL BUREAU, BOX 5, SANTIAGO, CUBA
 CN ARAM, BOX 299, RABAT, MOROCCO
 OR VIA URE, BOX 220, MADRID 4, SPAIN
 OR VIA ADEM, BOX 6133, CASABLANCA, MOROCCO
 CP RADIO CLUB BOLIVIANO, BOX 2111, LA PAZ, BOLIVIA
 CP5 QSL BUREAU, BOX 1900, COCHABAMBA, BOLIVIA
 CP6 QSL BUREAU, BOX 393, SANTA CRUZ, BOLIVIA
 CR9 CARDS FOR MEMBERS ONLY VIA HONG KONG AMATEUR RADIO TRANSMITTING SOCIETY, BOX 541, HONG KONG
 CT CARDS FOR MEMBERS ONLY VIA REP - IARU MEMBER - RUA D PEDRO V-7-4, LISBON 2, PORTUGAL
 OR VIA ASSOCIACAO DE RADIOAMADORES PORTUGUESES, BOX 446, PORTO, PORTUGAL
 CT2 ASSOCIACAO DOS RADIOAMADORES DOS ACORES, BOX 602, PONTA DELGADA, SAO MIGUEL ISLAND, AZORES
 CT3 ASSOCIACAO DOS RADIOAMADORES DA MADEIRA, BOX 358, FUNCHAL, MADEIRA IS
 CX RADIO CLUB OF URUGUAY, BOX 37, MONTEVIDEO, URUGUAY
 C21 NAUURU AMATEUR RADIO CLUB, BOX 29, NAUURU
 C6A BAHAMAS AMATEUR RADIO SOCIETY, BOX 6004, NASSAU, BAHAMA IS
 DA-DL DARC AMATEURFUNK ZENTRUM - IARU MEMBER - LINDENLEE 6, BOX 1155, D-3501, BAUNAT 1, FEDERAL REPUBLIC OF WEST GERMANY
 OR VIA DFV - QSL SERVICE, BOX 400, 6600 SAARBRUECKEN, FED REP OF WEST GERMANY
 DM QSL BUREAU, BOX 30, BERLIN 55, EAST GERMAN DEMOCRATIC REPUBLIC
 DU PARA QSL BUREAU, BOX 4083, MANILA, PHILIPPINES
 D2A LARA, BOX 484, LUANDA, ANGOLA, AFRICA
 D4 LARCV, BOX 145, MINDELO, REPUBLIC OF CAPE VERDE
 EA URE, UNION DE RADIOAFICIONADOS ESPANOLAS, BOX 220, MADRID 4, SPAIN
 EA4 URE, ESTACION OFICIAL DE LA URE, HORTALEZA 2, MADRID 4, SPAIN
 EI IRTS QSL BUREAU, IRISH RADIO TRANSMITTERS SOCIETY - IARU MEMBER - BOX 462, DUBLIN 9, IRELAND
 OR VIA AMATEUR RADIO SOCIETY OF IRELAND, BOX 938, DUBLIN 6, IRELAND
 EL LIBERIAN RADIO AMATEUR ASSOCIATION, BOX 1477, MONROVIA, LIBERIA
 ET3 ET3RC TELECOMS ARC, BOX 1047, ADDIS ABABA, ETHIOPIA
 FB8, FC, FM7, FPB, FY7 REF QSL SERVICE, 2 SQUARE TRUDAINE, 75009 PARIS, FRANCE
 OR VIA URC, BOX 435-01, 75025 PARIS CEDEX 1, FRANCE
 FG7 RADIO CLUB GUADELOUPE, BOX 387, 97110 POINTE-A-PITRE, GUADELOUPE, WEST INDIES
 FK8 ARANC, BOX 3956, NOUMEA, NEW CALEDONIA
 F08 RADIO CLUB OCEANIE, BOX 374, PAPEETE, TAHITI
 FY7 RADIO CLUB DE GUYANE, BOX 508, 97300 CAYENNE, FRENCH GUIANA
 G RSGB, RADIO SOCIETY OF GREAT BRITAIN, C/O E G ALLEN, G3DRN, 30 BOONANT GONS, LONDON SW20 0UD, GREAT BRITAIN
 CARDS FOR MEMBERS ONLY MAY BE SENT VIA ISWL QSL BUREAU, 1 GROVE RD, LYDNEY, GLOUCESTERSHIRE GL15 5JE, GREAT BRITAIN
 G0 W P HAID, G03GX
 G1 R R PARSONS, G13HXV
 GJ L D WOLFF, GJ8AAZ
 GM D R MACADIE, GM6MD
 GU W E BUTT, GU2FZC
 GW J L REID, GW3ANU
 HA-HG HSRL, BOX 214, 1050 BUDAPEST, HUNGARY
 HB-HB CARDS FOR MEMBERS ONLY MAY BE SENT VIA USKA QSL BUREAU, BOX 9, CH 4900 LANGENTHAL, BE, SWITZERLAND
 HC GUAYAQUIL RADIO CLUB - IARU MEMBER - BOX 5757, GUAYAQUIL, ECUADOR
 HC1 QUITO RADIO CLUB, BOX 289, QUITO, ECUADOR
 HC5 CUENCA RADIO CLUB, BOX 307, CUENCA, ECUADOR
 HH RADIO CLUB OF HAITI, BOX 501, PORT AU PRINCE, HAITI
 HI RADIO CLUB DOMINICAN, BOX 1157, SANTO DOMINGO, DN, DOMINICAN REPUBLIC, WEST INDIES
 HK LIGA COLOMBIANA DE RADIOAFICIONADOS - IARU MEMBER - BOX 584, BOGOTA, COLOMBIA
 OR VIA RADIO CLUB DE ANTIOQUIA, BOX 2500, MEDELLIN, COLOMBIA
 OR VIA ASSN DE RADIO EXPERIMENTADORES AFICIONADOS, BOX 51327, BARRANQUILLA, COLOMBIA
 HK8 QSL MANAGER, SALOMON TESONE, HK8CLS
 OR VIA LCRA, BOX 584, BOGOTA, COLOMBIA
 HL9 ALL HL9 STATIONS - ADDRESS WITH CALL LETTERS AND NAME, C/O UNITED STATES FORCES KOREA, OAC OFS, J-6, APO SAN FRANCISCO 96301
 HM KARL, CENTRAL BOX 162, SEOUL 100-00, KOREA
 HP LIGA PANAMENA RADIOAFICIONADOS - IARU MEMBER - BOX 175, PANAMA 9A, REPUBLIC DE PANAMA
 OR RADIO CLUB DE PANAMA, BOX 10745, PANAMA 4, PANAMA
 HP3 ESTEBAN D MACKAY, HP3ML
 HR RADIO CLUB TEGUCIGALPA, BOX 149-C, TEGUCIGALPA, DC, HONDURAS
 HR2 QSL BUREAU, RADIO CLUB DE HONDURAS, BOX 273, SAN PEDRO SULA, CORTES, HONDURAS
 HR5 NOE L CRUZ, HR5NLC
 OR VIA JESUS MAURICIO ZACAPA, HR1JMZ
 HS RAST QSL BUREAU, BOX 2008, C/O GPO, BANGKOK, THAILAND
 I, IV-12 ARI, V SCARLATTI 31, 20124 MILANO, ITALY
 IX OR VIA AOSTA VALLEY ARI GROUP, BOX 190, 11100 AOSTA, ITALY
 IC8 CARDS FOR CAPRI ISLAND VIA BOX 18, 80073 CAPRI, ITALY
 CARDS FOR ISCHIA ISLAND VIA BOX 41, 80077 ISCHIA, NAPOLI, ITALY
 IS8 COM REG SARDO, BOX 21, 09100 CAGLIARI, SARDINIA
 JA-JR JARL, 1-14-2 SUGAMO, TOSHIMA, TOKYO 170, JAPAN
 JT RADIO CLUB JTICAA, BOX 639, ULAN BATOR, MONGOLIA
 JW-JX NRRL, BOX 21, REFSTAD, OSLO 5, NORWAY
 JY ROYAL JORDANIAN RAS, BOX 2353, AMMAN, JORDAN
 KA FEARL-M, C/O SAM FLEMING, GARH-ID-GS-M, APO SAN FRANCISCO 96343
 KA6-KR6 RADIO SOCIETY OF OKINAWA, BOX 653, FPO SEATTLE 98773
 KC4US VIA COM NAV SUPP FOR ANTARCTICA, CODE 20/COMMUNICATIONS, FPO SAN FRANCISCO 96601
 KG4 GARC, BOX 73, FPO NEW YORK 09593
 KG6 MARIANA ISLANDS, EXCEPT GUAM, SEND CARDS DIRECT
 KG6 GUAM ONLY, VIA BOX 445, AGANA, GUAM, MARIANA IS
 KH6 JOHN H OKA, KH6DQ
 KL7 ALASKA QSL BUREAU, 4304 GARFIELD ST, ANCHORAGE, ALASKA 99503
 KM6 KM6BI, BOX 43, FPO SAN FRANCISCO 96614
 KP4 RADIO CLUB DE PUERTO RICO, BOX 1061, SAN JUAN, PUERTO RICO 00902
 KS6 LARRY GANDY, KS6DV
 KV4 GRACIANO BELARDO, KV4CF
 KX6 KWJALEIN AMATEUR RADIO CLUB, KX6BU
 OR ENIWETOK ARC, KX6BQ
 KZ5 KZ5 QSL BUREAU, BOX 407, BALBOA, CANAL ZONE
 LA-LJ NORWEGIAN RADIO RELAY LIGA, BOX 21, REFSTAD, OSLO 5, NORWAY
 LU RADIO CLUB ARGENTINO, C C 97, CORREO CENTRAL, 1000 BUENOS AIRES, CF, ARGENTINA
 LX ROBERT SCHOTT, LX1DC
 LZ CENTRAL QSL BUREAU, BOX 830, SOFIA, BULGARIA
 M1 GEOM MARIO GRAZIANI, M1B
 OA RCP, RADIO CLUB OF PERU, BOX 538, LIMA, PERU
 OD5 RAL QSL BUREAU, BOX 8888, BEIRUT, LEBANON
 OE, VSQ QSL BUREAU, BOX 999, A-1014 VIENNA, AUSTRIA
 OH SRAL QSL BUREAU, BOX 306, SF-00101 HELSINKI 10, FINLAND
 OK-DL CENTRAL RADIO CLUB, BOX 69, 11327 PRAHA 1, CZECHOSLOVAKIA
 ON UBA, BOX 634, B-1000 BRUSSELS 1, BELGIUM
 OR UBRC, BOX 224, B-1000 BRUSSELS 1, BELGIUM
 UBA, BOX 634, B-1000 BRUSSELS 1, BELGIUM
 OR QSL CENTRAL, OZ7BW, SOLBJERG HEDEVJEJ 76, DK-8355 NY-SOLBJERG, DENMARK
 OX4 OX4AA-ZZ VIA MARS DIRECTOR, XPIAB, APO NEW YORK 09121
 OX5 OX5AA-ZZ VIA MARS DIRECTOR, XPIAA, APO NEW YORK 09023
 OY FORDYSKIR RADIOAMATORAR, BOX 184, DK-3800 TORSHAVN, FAEROE IS
 PA-PI DUTCH QSL BUREAU, BOX 400, ROTTERDAM 3005, NETHERLANDS
 PJ VERONA QSL BUREAU, BOX 383, WILLEMSDAM, CURACAO, NETHERLANDS ANTILLES
 CARDS FOR ARUBA ONLY - ARUBA AMATEUR RADIO CLUB, BOX 273, SAN NICOLAS, ARUBA, NETHERLANDS ANTILLES
 PT-PY LABRE/DF, BOX 07-0004, 70000 BRASILIA, DF, BRASIL
 PZ VRAS, QSL MANAGER, BOX 566, PARAMARIBO, SURINAM
 P29 QSL BUREAU, BOX 204, PORT MORESBY, PAPUA NEW GUINEA
 SJ-SM SSA, OSTMARKSG 43, S-12342 FARSTA, SWEDEN
 SP PZK QSL BUREAU, SKRYTKA POCCIOWA 320, 00950 WARSZAWA, POLAND
 SU SULIM OR BOX 840, CAIRO, EGYPT
 SV MEDITERRANEAN SV QSL BUREAU, BOX 564, ATHENS, GREECE
 OR VIA SV QSL BUREAU, NARU, BOX 1442, ATHENS 20, GREECE
 SV8 QSL BUREAU, C/O SV8WY, APO NEW YORK 09223
 S79 SEYCHELLES AMATEUR RADIO SOCIETY, BOX 7388, MAHE, SEYCHELLES
 TA-TC TURK RADIO AMATORIERI CEMİYETI, BOX 699, KARAKOY, ISTANBUL, TURKEY

TF IRA, ISLENSKIR RADIO AMATORAR, BOX 1058, REYKJAVIK, ICELAND
 AMERICAN AMATEURS ONLY VIA KEFLAVIK AMATEUR RADIO ORGANIZATION, BOX 44, FPO NEW YORK 09571
 TG CRAG, BOX 115, GUATEMALA CITY, GUATEMALA
 TI RADIO CLUB OF COSTA RICA, BOX 2412, SAN JOSE, COSTA RICA
 TN8 QSL BUREAU, BOX 2239, BRAZZAVILLE, REPUBLIC OF CONGO
 TU2 ARAI, BOX 20036, ARIDJAN, IVORY COAST
 U CENTRAL RADIO CLUB, BOX 88, MOSCOW, RUSSIA
 VE CRRL CENTRAL QSL BUREAU OF CANADA, BOX 663, HALIFAX, NOVA SCOTIA B3J 2T3, CANADA
 VE1 L J FADER, VE1FQ
 VE2 A G DAEMEN, VE2IJ
 VE3 ONTARIO TRILLIUMS, VE3TOT
 VE4 W A STUNDEN, VE4BJ
 VE5 A LLOYD JONES, VE5JI
 VE6 G D HOLETON, VE6AGV
 VE7 HOWARD MARTIN, VE7AFY
 VE8 A STURKO, VE8NS
 VK1 QSL MANAGER - ACT DIVISION, BOX 46, CANBERRA 2600, ACT, AUSTRALIA
 VK2 VIA HUNTER BRANCH, POST OFFICE, TERALBA 2284, NSW, AUSTRALIA
 VK3 QSL BUREAU - OUTWARDS, A B D EVANS, VK3VQ, 45 1ST ST, BLACK ROCK 3193, VICTORIA, AUSTRALIA
 VK4 QSL OFFICER, BOX 638, GPO, BRISBANE 4001, QUEENSLAND, AUSTRALIA
 VK5 QSL BUREAU, GEORGE LUXON, VK5RX, 27 BELAIR RD, TORRENS PARK 5062, SOUTH AUSTRALIA, AUSTRALIA
 VK6 QSL BUREAU, C/O J RUMBLE, VK6RU, BOX F319, GPO PERTH 6001, WEST AUSTRALIA, AUSTRALIA
 VK7 QSL BUREAU, BOX 3710, GPO, HOBART 7001, TASMANIA, AUSTRALIA
 VK8 QSL BUREAU, C/O VK8HA, BOX 1418, DARWIN 5749, NORTHERN TERRITORY, AUSTRALIA
 VK9-SWL AND UNLISTED CALLS ONLY
 QSL BUREAU, C/O R JONES, 23 LANDALE ST, BOX HILL 3128, VICTORIA, AUSTRALIA
 VO1 E 2 CRRL VO QSL BUREAU, BOX 6, ST JOHN'S, NEWFOUNDLAND, CANADA A1C 5H5
 VP2A ANTIGUA - GERALD PRICE, VP2AC
 VP2D DOMINICA - AUSTIN L HARRIS, VP2DAJ
 VP2G GRENADA - FRED W PRESSEY, VP2GBL
 VP2L ST LUCIA - CLEMENT BOBB, VP2LCT
 VP2S ST VINCENT - VIA QSL BUREAU, BOX 142, ST VINCENT, WINDWARD IS
 VP8 CARDS FOR FALKLAND IS & SOUTH GEORGIA SHOULD BE SENT DIRECT ONLY CARDS FOR FALKLAND ISLAND STATIONS NOT LISTED MAY BE SENT VIA VP8ON
 CARDS FOR ANTARCTIC STATIONS MAY BE SENT C/O GPO STANLEY, FALKLAND ISLANDS - FOR ONWARD SHIPMENT
 VP9 RADIO SOCIETY OF BERMUDA, BOX 275, HAMILTON 5, BERMUDA
 VQ9 VQ9 QSL BUREAU, C/O MARS STATION, NCS DIEGO GARCIA, FPO SAN FRANCISCO 96685
 VS6 CARDS FOR MEMBERS ONLY VIA HARTS, BOX 541, HONG KONG
 VU AMATEUR RADIO SOCIETY OF INDIA, BOX 534, NEW DELHI 1, INDIA
 OR VIA CALCUTTA ARL, 17 WOODLANDS, 8/7 ALIPORE RD, CALCUTTA 700027, INDIA
 VY1 YUKON TERRITORY ONLY VIA YUKON AR, BOX 4597, WHITEHORSE, YUKON TERRITORY VIA 2R8, CANADA
 A, K, N, W1 FOREIGN STATIONS ONLY VIA HAMPDEN COUNTY A R ASSN, BOX 216, FOREST PARK STN, SPRINGFIELD, MASS 01108
 A, K, N, W2 FOREIGN STATIONS ONLY VIA NORTH JERSEY DX ASSN, BOX 8160, HALEDON, NEW JERSEY 07508
 A, K, N, W3 FOREIGN STATIONS ONLY VIA JESSE BIEBERMAN, W3KT, RFD 1-BOX 66, HALVERN, PA 19355
 A, K, N, W4 FOREIGN STATIONS ONLY VIA NATIONAL CAPITOL DX ASSN, BOX DX, BOYCE, VIRGINIA 22620
 WA-WB4 FOREIGN STATIONS ONLY VIA STERLING PARK ARC, BOX 599, STERLING, VIRGINIA 22170
 A, K, N, W5 FOREIGN STATIONS ONLY VIA ARRL W5 QSL BUREAU, BOX 1690, SHERMAN, TEXAS 75090
 A, K, N, W6 FOREIGN STATIONS ONLY VIA ARRL SIXTH (6TH) DISTRICT DX QSL BUREAU, 2814 EMPIRE AV, BURBANK, CALIF 91504
 A, K, N, W7 FOREIGN STATIONS ONLY VIA WILLAMETTE VALLEY DX CLUB, BOX 555, PORTLAND, OREGON 97207
 A, K, N, W8 FOREIGN STATIONS ONLY VIA W8TO, COLUMBUS A R ASSN, RADIO RM, 280 E BROAD ST, COLUMBUS, OHIO 43215
 A, K, N, W9 FOREIGN STATIONS ONLY VIA NORTHERN ILLINOIS DX ASSN, BOX 519, ELMHURST, ILLINOIS 60126
 A, K, N, W0 FOREIGN STATIONS ONLY VIA AK-SAR-BEN RC INC, BOX 291, OMAHA, NEBRASKA 68101
 XE IARU-LMRE, BOX 907, MEXICO 1, DF, MEXICO
 OR VIA ARARM QSL BUREAU, BOX 53, MEXICO 1, DF, MEXICO
 XZ BARTS, C/O ZAW YEE, XZ25Y, 9 FIFTH MILE, KABA AYE PAGODA RD, YANKIN, POST OFFICE, RANGOON, BURMA
 YA CARDS FOR QSO'S BEFORE AUG 19, 1973, MAY BE SENT VIA DK5AR, WOLFGANG KENNER, JOHANN UTINGERSTR 14, 4520 MELLE 1, GERMAN FED REPUBLIC
 YB1 QSL BUREAU, BOX 314, BANDUNG, INDONESIA
 YB2 CENTRAL JAVA NORTHERN AREA VIA QSL BUREAU, BOX 88, SEMARANG, INDONESIA
 YB3 CENTRAL JAVA SOUTHERN AREA VIA QSL BUREAU, BOX 73, SOLO, INDONESIA
 YB4 QSL BUREAU, BOX 59, SURABAYA, INDONESIA
 YB6 JUHANES TITALEY, YB4GA
 YB7-Q QSL BUREAU, BOX 464, MEDAN, INDONESIA
 YK ORARI QSL BUREAU, BOX 2761, JAKARTA, INDONESIA
 YN QSL BUREAU, BOX 35, DAMASCUS, SYRIA
 YO MIKE MURCIANO, YNIMO/W4, BOX 340902, CUNAL GABLES, FLORIDA 33134
 YP THE CENTRAL RADIO CLUB, BOX 1395, BUCURESTI 5, ROMANIA
 YS MEMBERS ONLY - CRAS, BOX 517, SAN SALVADOR, EL SALVADOR
 YU SRJ, BOX 48, 11001 BELGRADE, YUGOSLAVIA
 YU1 SR5, BOX 64, 11001 BELGRADE, YUGOSLAVIA
 YU2 SRH, DALMATINSKA 12, 41000 ZAGREB, YUGOSLAVIA
 YU3 ZRS, BOX 180, 61001 LJUBLJANA, YUGOSLAVIA
 YU4 SR BIH, BOX 61, 71001 SARAJEVO, YUGOSLAVIA
 YU5 SRM, BOX 14, 91001 SKOPJE, YUGOSLAVIA
 YV IARU BUREAU, RADIO CLUB VENEZOLANA, BOX 2285, CARACAS, DF, VENEZUELA
 OR ARV QSL BUREAU, BOX 3636, CARACAS, DF, VENEZUELA
 ZB2 GIBALTAR ARS, BOX 292, GIBALTAR
 ZC4 JOINT SIGNAL BOARD HQQTRS, BRITISH FORCES CYPRUS, BFPO 53, LONDON GPO, GREAT BRITAIN
 ZD7 W R STEVENS, ZD7SD
 ZD8 ASCENSION AR RELAY LEAGUE, ZD8AR
 ZE RSR QSL MANAGER, BOX 2377, SALISBURY, RHODESIA
 ZF1 CARDS ADDRESSED TO CAYMAN IS ONLY MAY BE SENT VIA ZFIAX
 ZK1 QSL BUREAU, RADIO STATION KAROTONGA, KAROTONGA, COOK IS
 ZL NZART, BOX 40-212, UPPER HUTT, NEW ZEALAND
 ZP RADIO CLUB PARAGUAYO, CASILLA DE CORREO 512, ASUNCION, PARAGUAY
 ZR-ZS FOR MEMBERS ONLY - SARL, BOX 3037, CAPE TOWN 8000, CAPE PROVINCE, SOUTH AFRICA
 3A2 PIERRE ANDERHALT, 3A2CN
 OR DIRECTOR GENERALE DES TELECOMS, 16 BLVD DE SUISSE, MONTE CARLO, MONACO
 3B6-9 PAUL CABOCHE, 3B8AD
 3D2 QSL BUREAU, BOX 184, SUVA, FIJI ISLANDS
 3D6 RADIO SOCIETY OF SWAZILAND, BOX 21, EZULWINI, SWAZILAND
 457 RADIO SOCIETY OF SRI LANKA, ELETTRA, 7-1/1 47TH LANE, COLOMBO, SRI LANKA, CEYLON
 4X4-4Z4 SHALOM BACALU, 4Z4BS, IARC QSL BUREAU MANAGER, BOX 10191, TEL-AVIV 61290, ISRAEL
 5A QSL BUREAU, BOX 372, TRIPOLI, LIBYA
 5B4 CYPRUS AMATEUR RADIO SOCIETY, BOX 1267, LIMASSOL, CYPRUS
 5N2 NIGERIAN AMATEUR RADIO SOCIETY, BOX 2873, LAGOS, NIGERIA
 5V VIA BOX 33, ATAKPAME, TOGO
 5W1 WESTERN SAMOA RC, QSL BUREAU - SECRETARY, BOX 1069, APIA, WESTERN SAMOA
 5Z4 RSEA QSL BUREAU, BOX 45681, NAIROBI, KENYA
 60 VIA BOX 397, MOGADISCIO, SOMALI REPUBLIC
 6W8 REF OR ARAS, BOX 971, DAKAR, SENEGAL
 6Y5 JAMAICA AMATEUR RADIO ASSN, JAMAICA RED CROSS, 76 ARNOLD ST, KINGSTON 5, JAMAICA, WEST INDIES
 7Q7 H Y BYUMBWE, 7Q7AE
 7X ARA QSL SERVICE, BOX 2, ALGER, ALGERIA
 8P6 RADIO SOCIETY OF BARBADOS, BOX 814E, BRIDGETOWN, BARBADOS, WINDWARD IS
 8R1 IVAN GOUVEIA, 8R1AG
 9G1 CARDS FOR MEMBERS ONLY, GHANA AMATEUR RADIO SOCIETY, BOX 3773, ACCRA, GHANA
 9H1-5 MARL, BOX 575, VALLETTA, MALTA
 9H4 ERIC ROGERS, 9H4G
 9T-9J RADIO SOCIETY OF ZAMBIA, BOX 332, KITWE, ZAMBIA
 9K2 NASIR H KHAN, 9K2AN
 9L1 SIERRA LEONE ARS, 9L1SL, BOX 16, FREETOWN, SIERRA LEONE
 9M2, 6, 8 MARTS, BOX 777, KUALA LUMPUR, MALAYSIA
 9Q5 UZRA, QSL BUREAU, BOX 1459, KINSHASA, REPUBLIC OF ZAIRE
 9U5 BARC QSL BUREAU, ONSTO, 8 BUTERBEKEWEG, 8-8200 BRUGGE, WV, BELGIUM
 9V1 SARTS, BOX 2728, REPUBLIC OF SINGAPORE 1
 9X5 RAR QSL BUREAU, BOX 663, KIGALI, REPUBLIC OF RWANDA
 9Y4 TRINIDAD & TOBAGO AMATEUR RADIO SOCIETY, BOX 1167, PORT-OF-SPAIN, TRINIDAD

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		TKA-TKZ	FRANCE	5WA-5WZ	WESTERN SAMOA
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CNA-CNZ	MOROCCO	TOA-TQZ	FRANCE	6AA-6BZ	EGYPT
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CQA-CRZ	PORTUGAL	TTA-TTZ	CHAD	6KA-6NZ	KOREA
CSA-CUZ	PORTUGAL	TUA-TUZ	IVORY COAST	6OA-6OZ	SOMALI
CVA-CXZ	URUGUAY	TVA-TXZ	FRANCE	6PA-6SZ	PAKISTAN
CYA-CZZ	CANADA	TYA-TYZ	BENIN	6TA-6UZ	SUDAN
		TZA-TZZ	MALI	6VA-6WZ	SENEGAL
				6XA-6XZ	MADAGASCAR
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DUA-DZZ	PHILIPPINES	URA-UTZ	UKRAINIAN SOVIET SOCIALIST REP.	6ZA-6ZZ	LIBERIA
		UUA-UZZ	UNION OF SOVIET SOCIALIST REP.		
EAA-EHZ	SPAIN	VAA-VGZ	CANADA	7AA-7IZ	INDONESIA
EIA-EJZ	IRELAND	VHA-VNZ	AUSTRALIA	7JA-7NZ	JAPAN
EKA-EKZ	UNION OF SOVIET SOCIALIST REP.	VOA-VOZ	CANADA	7OA-7OZ	YEMEN
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EUA-EWZ	BYELORUSSIAN SSR				
EXA-EZZ	UNION OF SOVIET SOCIALIST REP.				
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		XJA-XOZ	CANADA	8OA-8OZ	BOTSWANA
GAA-GZZ	GREAT BRITAIN & NO IRELAND	XPA-XPZ	DENMARK	8PA-8PZ	BARBADOS
		XQA-XRZ	CHILE	8QA-8QZ	MALDIVES IS
HAA-HAZ	HUNGARY	XSA-XSZ	CHINA	8RA-8RZ	GUYANA
HBA-HBZ	SWITZERLAND	XTA-XTZ	UPPER VOLTA	8SA-8SZ	SWEDEN
HCA-HDZ	ECUADOR	XUA-XUZ	CAMBODIA	8TA-8YZ	INDIA
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HFA-HFZ	POLAND	XWA-XWZ	LAOS		
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HHA-HHZ	HAITI	XYA-XZZ	BURMA	9BA-9DZ	IRAN
HIA-HIZ	DOMINICAN REPUBLIC			9EA-9FZ	ETHIOPIA
HJA-HKZ	COLOMBIA	YAA-YAZ	AFGHANISTAN	9GA-9GZ	GHANA
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		YVA-YYZ	VENEZUELA	9XA-9XZ	RWANDA
IAA-IZZ	ITALY	YZA-YZZ	YUGOSLAVIA	9YA-9ZZ	TRINIDAD AND TOBAGO
JAA-JSZ	JAPAN	ZAA-ZAZ	ALBANIA	A2A-A2Z	BOTSWANA
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JWA-JXZ	NORWAY	ZKA-ZMZ	NEW ZEALAND	A4A-A4Z	OMAN
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KAA-KZZ	UNITED STATES OF AMERICA	ZRA-ZUZ	SOUTH AFRICA - SW AFRICA	A8A-A8Z	LIBERIA
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LDA-LWZ	ARGENTINA	3AA-3AZ	MONACO	C3A-C3Z	ANDORRA
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OFA-OJZ	FINLAND	3XA-3XZ	GUINEA	D7A-D9Z	KOREA
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PJA-PJZ	NETHERLANDS ANTILLES	4JA-4LZ	UNION OF SOVIET SOCIALIST REP.	J2A-J2Z	DJIBOUTI
PKA-POZ	INDONESIA	4MA-4MZ	VENEZUELA	J3A-J3Z	GRENADA
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		4TA-4TZ	PERU		
QAA-QZZ	SERVICE ABBREVIATIONS	4UA-4UZ	UNITED NATIONS	L2A-L9Z	ARGENTINA
RAA-RZZ	UNION OF SOVIET SOCIALIST REP.	4VA-4VZ	HAITI	P2A-P2Z	PAPUA NEW GUINEA
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SSA-SSM	EGYPT	4ZA-4ZZ	ISRAEL		
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SUA-SUZ	EGYPT	5BA-5BZ	CYPRUS	S6A-S6Z	SINGAPORE
SVA-SZZ	GREECE	5CA-5GZ	MOROCCO	S7A-S7Z	SEYCHELLES
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FOR YOUR DESK, DOOR, RIG AND YOU!

Your name and call letters, or office title, engraved on any one of these attractive, modern design, duo-color, laminated phenolic nameplates. An efficient, thoughtful and important item for your home or office.

FOR YOUR DESK

1" x 7"
2" x 8"

Select the satin smooth, walnut grained or jet black nameplate with white letters (up to 20 letters and numbers per line), mounted in satin gold or silver finish, anodized aluminum holder. Two sizes as illustrated above.

FOR YOUR DOOR or rig

1" x 4"
1" x 7"
2" x 8"

Nameplates in three sizes for your door or rig in walnut grained or jet black, with white letters. Up to 18 letters per line on the 1" x 4" plate. Up to 20 letters on the others. Each with special adhesive back for immediate installation. No tools needed.

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2" x 8"

Handsome desk set with either jet black or walnut grained nameplate (white letters), mounted in satin gold or silver anodized aluminum holder. Up to 20 letters per line. Two standard ball point pens included. Rear compartment for business cards, pads, etc.

Call letters only

W9XYZ
LAPEL PIN (with safety catch)
Your call letters engraved on a duo-color plastic pin. Size 1/2" x 2". Available in white letters on black, blue or red background. Also black letters on white background. Up to 15 letters—1 line only.
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\$3.50 \$4.00
\$4.00 \$4.50
\$5.25 \$5.75

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PRINT wording just as it is to appear on your nameplate or pin

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Total Amount \$ _____
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Amount
enclosed \$ _____

Kind of Nameplate	Color of Nameplate	Line Arrangement	Size	Color of Holder if Desk or Exec. Set
<input type="checkbox"/> Desk	<input type="checkbox"/> Walnut Grained <input type="checkbox"/> Jet Black	All letters same size Up to 20 characters per line	<input type="checkbox"/> 1" x 7" <input type="checkbox"/> 2" x 8"	<input type="checkbox"/> Gold <input type="checkbox"/> Silver
<input type="checkbox"/> Door or rig	<input type="checkbox"/> Walnut Grained <input type="checkbox"/> Jet Black	All letters same size Up to 18 characters per line on 4" Up to 20 characters per line on 7" & 8"	<input type="checkbox"/> 1" x 4" <input type="checkbox"/> 1" x 7" <input type="checkbox"/> 2" x 8"	
<input type="checkbox"/> Exec. Desk Set	<input type="checkbox"/> Walnut Grained <input type="checkbox"/> Jet Black	All letters same size Up to 20 characters per line		<input type="checkbox"/> Gold <input type="checkbox"/> Silver
<input type="checkbox"/> Lapel Pin	<input type="checkbox"/> Jet Black <input type="checkbox"/> White <input type="checkbox"/> Red <input type="checkbox"/> Blue	All letters same size Call letters only		

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City: _____ State: _____ Zip Code: _____

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ENGRAVED WITH YOUR CALL LETTERS



Lapel Pin
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Tie Bar



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Charm

Item 4-G, 20K gold plated
Item 4-R, Rhodium plated
Each \$9.00



I am Pegasus

.... according to legend, winged and with blazing hoofs, mane flying, crossed the heavens with such speed I caused the crash of lightning and the roar of thunder.

Of course, this is a myth, but what an exciting thought—to race across the heavens with the speed legend gave me. Naturally it's really impossible for me to have accomplished such a feat but not for you... a radio amateur.

You can reach the corners of the world... with a turn of a knob you can cross the heavens—the whole world is yours... adventure is yours.

We have much in common—my legend of adventure—your history of adventure, as part of amateur radio.

We join our past, present and future here, in this emblem.

A brand new, modern design, emblem for radio amateurs to display their own call letters. A truly beautiful emblem you will be proud to wear.

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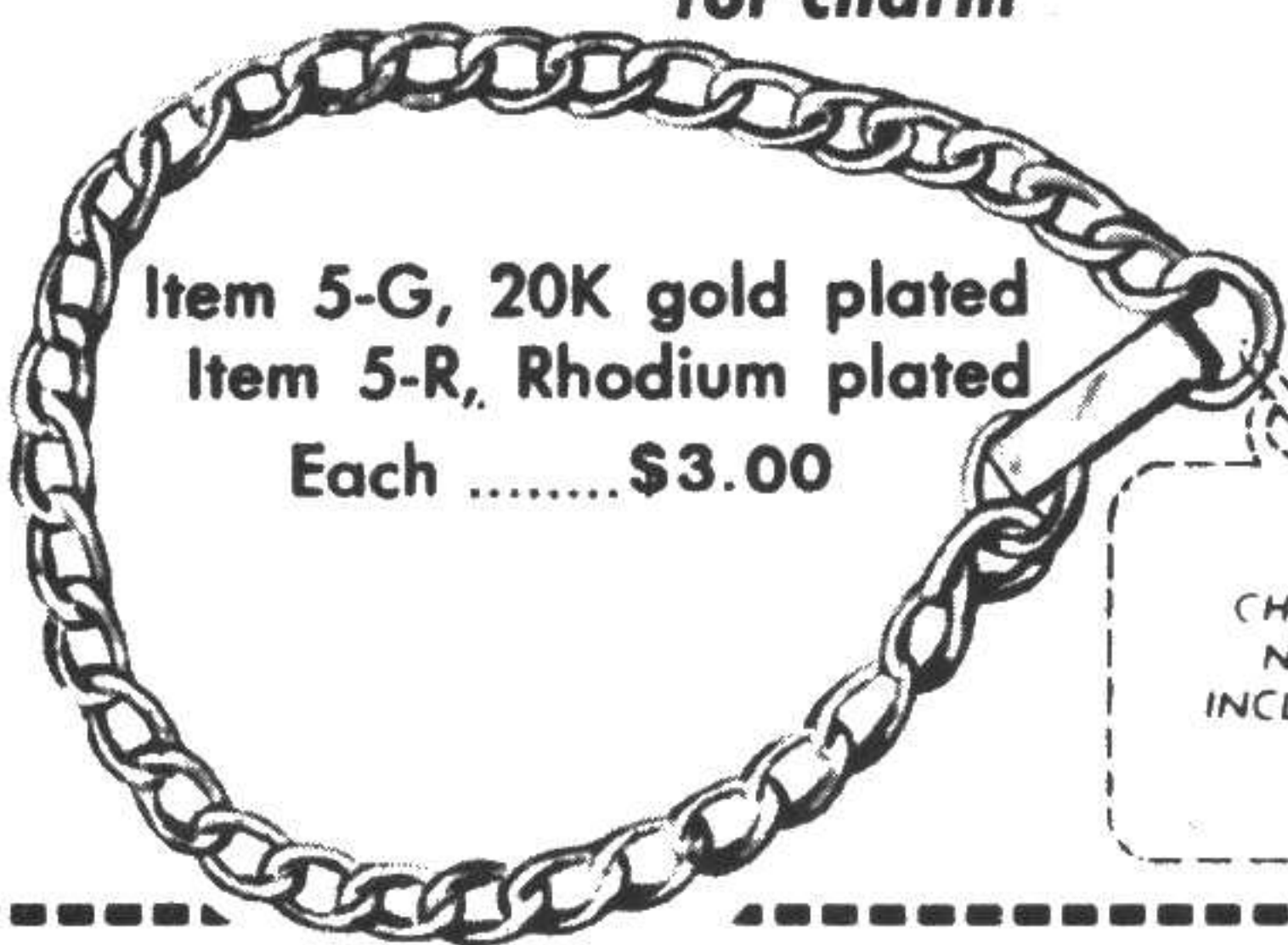
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Each \$3.00



CHARM NOT INCLUDED



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Item 6-G, 20K gold plated
Item 6-R, Rhodium plated
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RFD

P.O. Box No.

Town or City

State

Zip Code

Total Amount \$ _____

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add 5% sales tax

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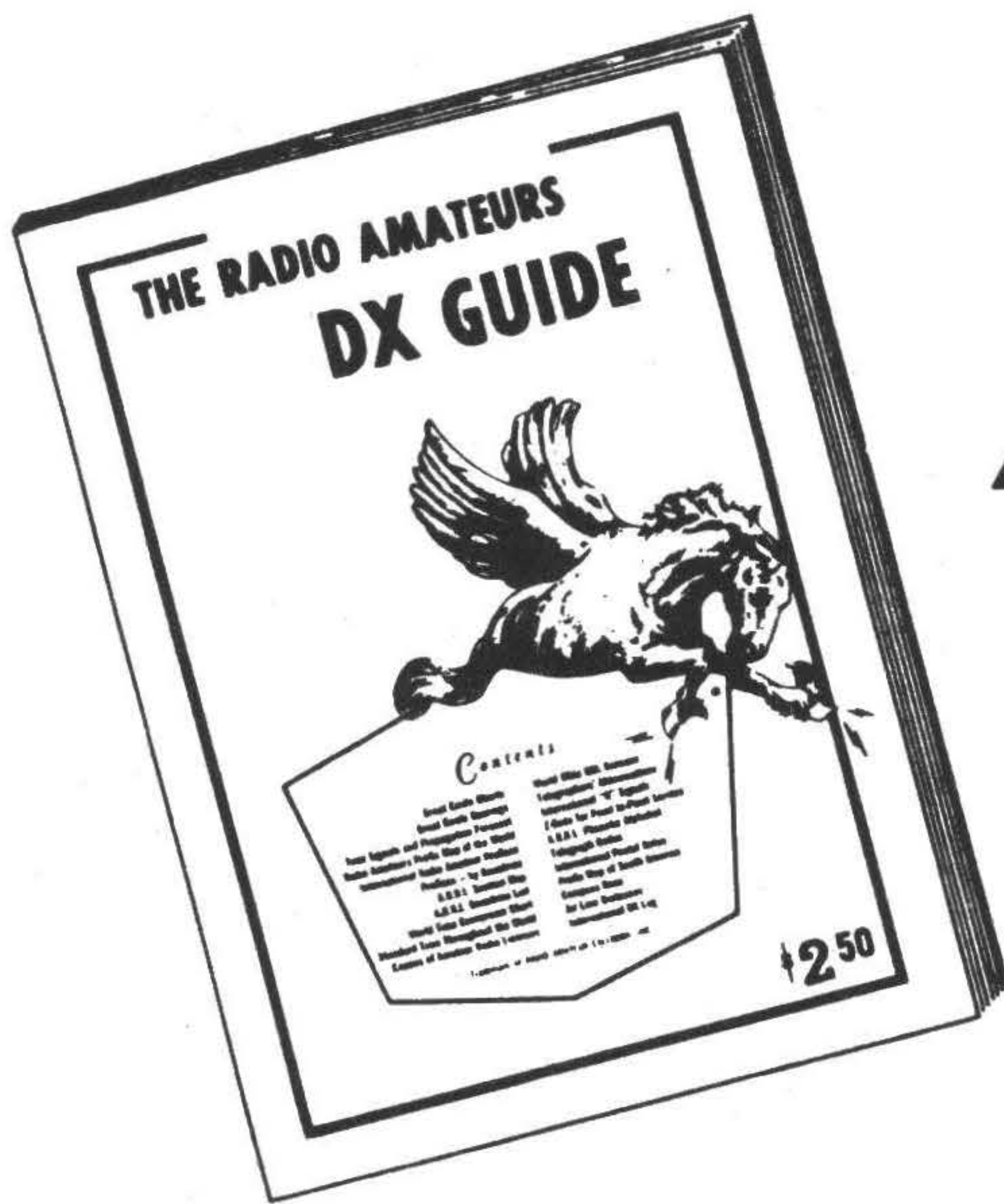
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TWO WORLD MAPS SHOWING RADIO AMATEUR PREFIXES—both 40-zone and 90-zone.

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PREFIX MAP OF SOUTH AMERICA—showing the prefix designation of all sections and countries.

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TIME CONVERSION CHART—determine the time in any time zone in the world. Also know whether it is today or tomorrow at the place heard or worked.

TIME THROUGHOUT THE WORLD—time zones of most countries. Explains the International Time Zone System.

POSTAL INFORMATION—rates for QSL cards, first class and airmail letters to foreign countries. Also the number of international reply coupons for the proper postage for a return airmail letter is shown for most countries.

ARRL COUNTRIES LIST—official list of ARRL DX contest and DXCC. Courtesy ARRL.

COMPASS ROSE—for that rotary beam indicator, graduated for 360 degrees. With white background and no print on the reverse side of the sheet.

PLUS THESE INTERESTING FEATURES—INTERNATIONAL "Q" SIGNALS; WORLD WIDE QSL BUREAUS; "Z" CODE FOR POINT-TO-POINT SERVICE; ARRL PHONETIC ALPHABET; TELEGRAPHERS ABBREVIATIONS; DX OPERATING CODE; TELEGRAPH CODES.

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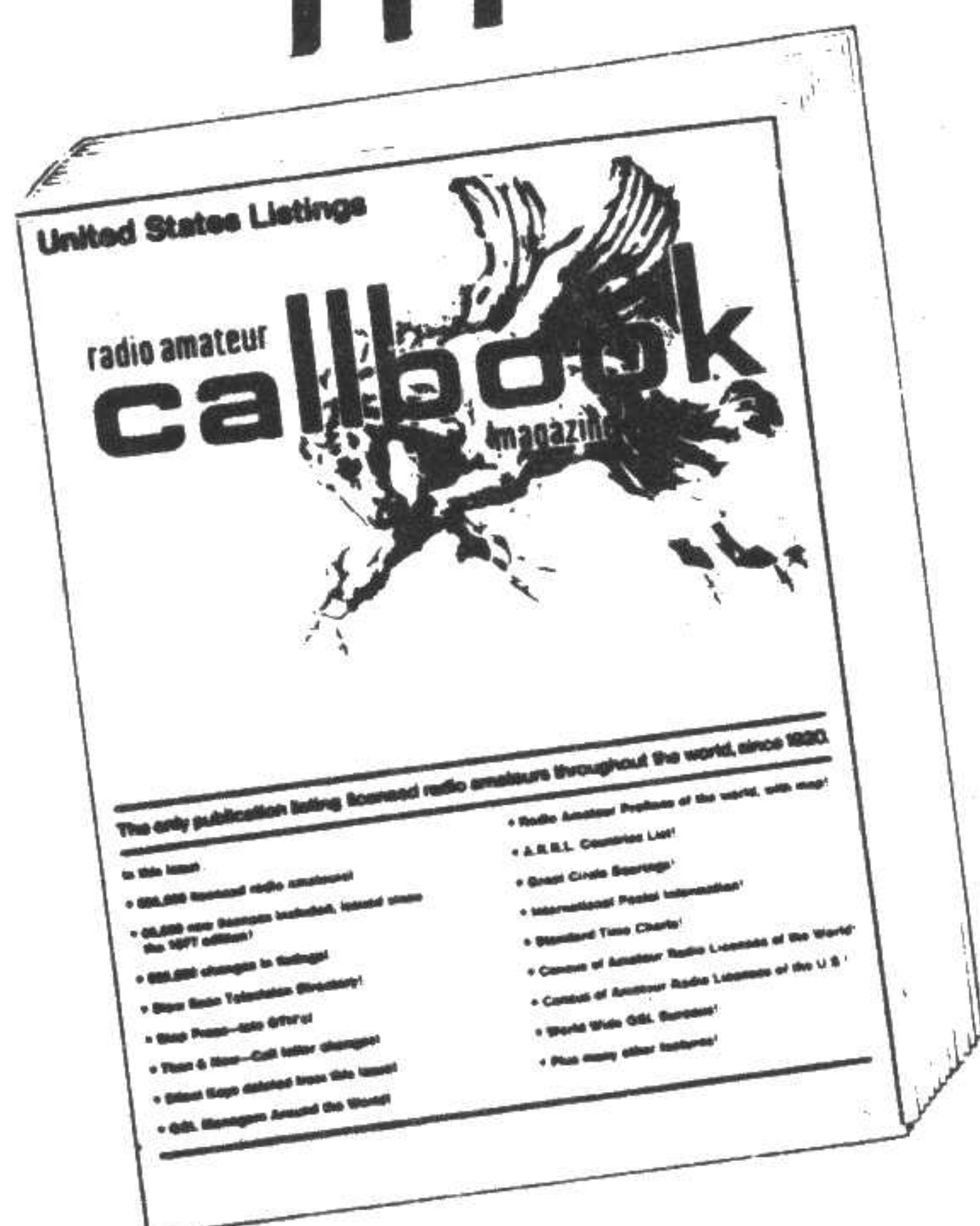
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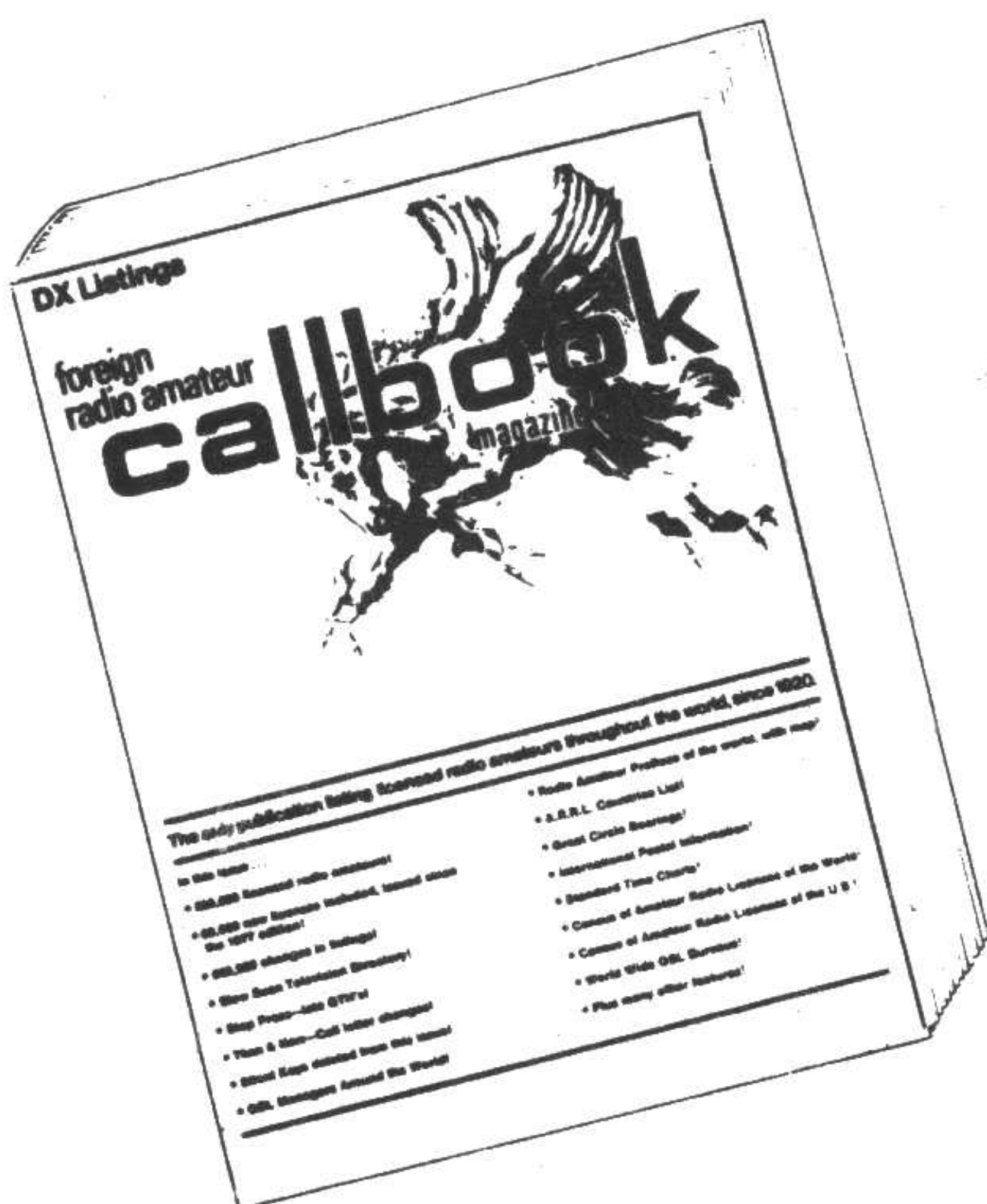
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